

APPENDIX 1

FOOD DIARY SUMMARY

Below are the menu recommendations we are using in our Siesta Diet: HCG and the Low Carbohydrate Lifestyle Book. We will give you our recommendations or meals that I chose for my first 28 days, and then a second chart so that YOU can keep a track of what you are eating. Keeping a diary of your food intake for the first 28 days is extremely helpful in achieving your weight loss and health goals. Another way to record your food intake is to daily use your cell phone camera (everyone seems to have these now a days) and take a picture of each meal, and anything you might put into your mouth. It's just another way of helping yourself be accountable for what you eat. This is actually pretty fun and automatically gives you a visual "log" of all your meals and overall eating habits so there's no tricking yourself into thinking you're eating great if you're really aren't. This is also a great way of comparing what you eat daily with a friend or spouse.

DAY # 1		Siesta Beach HCG/Low Carb Diet	
TIME OF DAY		MEAL	
BREAKFAST		THREE EGGS/BACON; CUP OF COFFEE	
SNACK		CHEESE STICK(2)	
LUNCH		FOUR ROLL-UPS (TURKEY AND SMOKED GOUDA)	
SNACK		JAY ROBB CHOCOLATE PROTEIN WHEY SHAKE	
DINNER		STEAK-12 OZ;SALAD-SPINACH,ETC/BLUE CHEESE	
DESSERT		THREE CUPS SUGAR FREE JELLO/SUGAR FREE WHIPPED CREAM	

PERSONAL FOOD DIARY:

DAY # 1		Siesta Beach HCG/Low Carb Diet	
TIME OF DAY		MEAL	
BREAKFAST			
SNACK			
LUNCH			
SNACK			
DINNER			
DESSERT			

DAY # 2 Siesta Beach HCG/Low Carb Diet	
TIME OF DAY	MEAL
BREAKFAST	JAY ROBB CHOCOLATE PROTEIN WHEY SHAKE; CUP OF COFFEE
SNACK	TWO HARDBOILED EGGS
LUNCH	FOUR ROLL-UPS (ROAST BEEF AND WHITE CHEDDAR)
SNACK	TWO CHEESE STICKS- Sargento Colby Jack
DINNER	STEAK-16 OZ;SALAD-SPINACH,ETC/BLEU CHEESE
DESSERT	THREE CUPS SUGAR FREE JELLO/SUGAR FREE WHIPPED CREAM

PERSONAL FOOD DIARY:

DAY # 2 Siesta Beach HCG/Low Carb Diet	
TIME OF DAY	MEAL
BREAKFAST	
SNACK	
LUNCH	
SNACK	
DINNER	
DESSERT	

DAY # 3		Siesta Beach HCG/Low Carb Diet
TIME OF DAY	MEAL	
BREAKFAST	JAY ROBB CHOCOLATE PROTEIN WHEY SHAKE; CUP OF COFFEE	
SNACK	CHEESE STICK(2)	
LUNCH	TWO ROLL-UPS (REUBEN SANDWICH(CORN BEEF) WITHOUT BREAD BUT WITH LOW CARB ROLLUP	
SNACK	NONE	
DINNER	STEAK-16 OZ;SALAD-SPINACH,ETC/BLUE CHEESE	
DESSERT	ATKINS STRAWBERRY SHAKE/WHIPPED CREAM	

PERSONAL FOOD DIARY:

DAY # 3		Siesta Beach HCG/Low Carb Diet
TIME OF DAY	MEAL	
BREAKFAST		
SNACK		
LUNCH		
SNACK		
DINNER		
DESSERT		

DAY # 4 Siesta Beach HCG/Low Carb Diet	
TIME OF DAY	MEAL
BREAKFAST	THREE EGGS/BACON/CHEDDAR ON LOW CARB TORTILLA/ CUP OF COFFEE
SNACK	MACADAMIA NUTS (10)
LUNCH	FOUR ROLL-UPS (TURKEY AND MUENSTER)
SNACK	WHEY PROTEIN MILKSHAKE (CHOCOLATE)
DINNER	SALAD-SPINACH,ETC/BLUE CHEESE
DESSERT	THREE CUPS SUGAR FREE JELLO/SUGAR FREE WHIPPED CREAM

PERSONAL FOOD DIARY:

DAY # 4 Siesta Beach HCG/Low Carb Diet	
TIME OF DAY	MEAL
BREAKFAST	
SNACK	
LUNCH	
SNACK	
DINNER	
DESSERT	

DAY # 5 Siesta Beach HCG/Low Carb Diet	
TIME OF DAY	MEAL
BREAKFAST	JAY ROBB CHOCOLATE PROTEIN WHEY SHAKE PLUS WHIPPED CREAM; CUP OF COFFEE
SNACK	JAY ROBB CHOCOLATE PROTEIN WHEY SHAKE
LUNCH	FOUR ROLL-UPS (TURKEY AND SMOKED GOUDA)
SNACK	4- BABY-BELL (LAUGHING COW) CHEESE PIECES
DINNER	SALAD-ROMAINE,ETC/BLUE CHEESE/CHICKEN PIECES
DESSERT	ATKINS VANILLA SHAKE WITH BLUEBERRIES/ICE/BLENDED WITH SUGAR FREE WHIPPED CREAM

PERSONAL FOOD DIARY:

DAY # 5 Siesta Beach HCG/Low Carb Diet	
TIME OF DAY	MEAL
BREAKFAST	
SNACK	
LUNCH	
SNACK	
DINNER	
DESSERT	

DAY # 6		Siesta Beach HCG/Low Carb Diet
TIME OF DAY	MEAL	
BREAKFAST	JAY ROBB CHOCOLATE PROTEIN WHEY SHAKE PLUS WHIPPED CREAM; CUP OF COFFEE	
SNACK	2- HARD BOILED EGGS	
LUNCH	FOUR ROLL-UPS (TURKEY AND WHITE CHEDDAR)	
SNACK	3 CHEESE STICKS	
DINNER	THREE EGGS/BACON/CHEESE/LOCARB WRAP	
DESSERT	THREE CUPS SUGAR FREE JELLO/SUGAR FREE WHIPPED CREAM	

PERSONAL FOOD DIARY:

DAY # 6		Siesta Beach HCG/Low Carb Diet
TIME OF DAY	MEAL	
BREAKFAST		
SNACK		
LUNCH		
SNACK		
DINNER		
DESSERT		

DAY # 7		Siesta Beach HCG/Low Carb Diet	
TIME OF DAY		MEAL	
BREAKFAST		THREE EGGS/BACON; CUP OF COFFEE	
SNACK		CHEESE STICK(2)	
LUNCH		FOUR ROLL-UPS (HAM AND EXTRA SHARP CHEDDAR)	
SNACK		TWO HARD-BOILED EGGS	
DINNER		LEMON PEPPER CHICKEN-ENTIRE	
DESSERT		THREE CUPS SUGAR FREE JELLO/SUGAR FREE WHIPPED CREAM	

PERSONAL FOOD DIARY:

DAY # 7		Siesta Beach HCG/Low Carb Diet	
TIME OF DAY		MEAL	
BREAKFAST			
SNACK			
LUNCH			
SNACK			
DINNER			
DESSERT			

DAY # 8 Siesta Beach HCG/Low Carb Diet	
TIME OF DAY	MEAL
BREAKFAST	WHEY PROTEIN MILKSHAKE (CHOCOLATE); CUP OF COFFEE
SNACK	TWO HARD-BOILED EGGS
LUNCH	FOUR ROLL-UPS (TURKEY AND HORSERADISH CHEDDAR)
SNACK	WHEY PROTEIN MILKSHAKE (CHOCOLATE)
DINNER	STEAK-16 OZ;SALAD-SPINACH,ETC/BLUE CHEESE
DESSERT	STRAWBERRY ATKINS SHAKE WITH WHIPPED CREAM

PERSONAL FOOD DIARY:

DAY # 8 Siesta Beach HCG/Low Carb Diet	
TIME OF DAY	MEAL
BREAKFAST	
SNACK	
LUNCH	
SNACK	
DINNER	
DESSERT	

DAY # 9 Siesta Beach HCG/Low Carb Diet	
TIME OF DAY	MEAL
BREAKFAST	CHEESE OMELET; CUP OF COFFEE
SNACK	CHEESE STICK(2)
LUNCH	FOUR ROLL-UPS (TURKEY AND CANADIAN SHARP CHEDDAR)
SNACK	WHEY PROTEIN MILKSHAKE (CHOCOLATE)
DINNER	2-CHEESEBURGERS/NO BUN OR KETCHUP;SALAD-SPINACH,ETC/BLEU CHEESE Option: cauliflower "mashed potatoes"
DESSERT	THREE CUPS SUGAR FREE JELLO/SUGAR FREE WHIPPED CREAM

PERSONAL FOOD DIARY:

DAY # 9 Siesta Beach HCG/Low Carb Diet	
TIME OF DAY	MEAL
BREAKFAST	
SNACK	
LUNCH	
SNACK	
DINNER	
DESSERT	

DAY # 10		Siesta Beach HCG/Low Carb Diet	
TIME OF DAY		MEAL	
BREAKFAST		WHEY PROTEIN MILKSHAKE (CHOCOLATE ; CUP OF COFFEE	
SNACK		4- BABY BELL GOUDA CHEESE PIECE	
LUNCH		FOUR ROLL-UPS (PASTRAMI AND SWISS CHEESE)	
SNACK		WHEY PROTEIN MILKSHAKE (CHOCOLATE)	
DINNER		BAY SCALLOPS-SAUTEED IN OLIVE OIL/COVERED WITH ROMANO AND PARMESAN CHEESE/3 CELERY STICKS WITH BLUE CHEESE DRESSING	
DESSERT		VANILLA ATKINS SHAKE WITH RASPBERRIES(5) BLENDED WITH ICE AND TOPPED WITH WHIPPED CREAM	

PERSONAL FOOD DIARY:

DAY # 10		Siesta Beach HCG/Low Carb Diet	
TIME OF DAY		MEAL	
BREAKFAST			
SNACK			
LUNCH			
SNACK			
DINNER			
DESSERT			

DAY # 11 Siesta Beach HCG/Low Carb Diet	
TIME OF DAY	MEAL
BREAKFAST	THREE EGGS/BACON; CUP OF COFFEE
SNACK	CHEESE STICK(2)
LUNCH	FOUR ROLL-UPS (ROAST BEEF AND SMOKED GOUDA)
SNACK	WHEY PROTEIN MILKSHAKE (CHOCOLATE)
DINNER	STEAK-12 OZ;SALAD-SPINACH,ETC/BLUE CHEESE
DESSERT	STRAWBERRY ATKINS SHAKE WITH WHIPPED CREAM

PERSONAL FOOD DIARY:

DAY # 11 Siesta Beach HCG/Low Carb Diet	
TIME OF DAY	MEAL
BREAKFAST	
SNACK	
LUNCH	
SNACK	
DINNER	
DESSERT	

DAY # 12 Siesta Beach HCG/Low Carb Diet	
TIME OF DAY	MEAL
BREAKFAST	WHEY PROTEIN SHAKE (CHOCOLATE)
SNACK	CHEESE STICK(2)
LUNCH	
SNACK	THREE ROLL-UPS (ROAST BEEF AND WHITE CHEDDAR)
DINNER	BAY SCALLOPS-SAUTEED IN OLIVE OIL/COVERED WITH ROMANO AND PARMESAN CHEESE/3 CELERY STICKS WITH BLUE CHEESE DRESSING
DESSERT	THREE CUPS SUGAR FREE JELLO/SUGAR FREE WHIPPED CREAM

PERSONAL FOOD DIARY:

DAY # 12 Siesta Beach HCG/Low Carb Diet	
TIME OF DAY	MEAL
BREAKFAST	
SNACK	
LUNCH	
SNACK	
DINNER	
DESSERT	

DAY # 13		Siesta Beach HCG/Low Carb Diet	
TIME OF DAY		MEAL	
BREAKFAST		THREE EGGS/BACON; CUP OF COFFEE	
SNACK		ALMONDS	
LUNCH		FOUR ROLL-UPS (TURKEY AND SMOKED GOUDA)	
SNACK		BABY BELL CHEESE PIECES-2	
DINNER		STEAK-16 OZ;SALAD-SPINACH,ETC/BLUE CHEESE	
DESSERT		STRAWBERRY ATKINS SHAKE BLENDED WITH ICE AND FOUR STRAWBERRIES TOPPED WITH WHIPPED CREAM	

PERSONAL FOOD DIARY:

DAY # 13		Siesta Beach HCG/Low Carb Diet	
TIME OF DAY		MEAL	
BREAKFAST			
SNACK			
LUNCH			
SNACK			
DINNER			
DESSERT			

DAY # 14		Siesta Beach HCG/Low Carb Diet	
TIME OF DAY		MEAL	
BREAKFAST		THREE EGGS/BACON; CUP OF COFFEE	
SNACK		3-HARD BOILED EGGS	
LUNCH		FOUR ROLL-UPS (TURKEY AND SMOKED GOUDA)	
SNACK		WHEY PROTEIN MILKSHAKE (CHOCOLATE)	
DINNER		3-CHEESEBURGERS/NO BUN OR KETCHUP;SALAD-SPINACH,ETC/BLUE CHEESE	
DESSERT		VANILLA ATKINS SHAKE, BLUEBERRIES WITH WHIPPED CREAM	

PERSONAL FOOD DIARY:

DAY # 14		Siesta Beach HCG/Low Carb Diet	
TIME OF DAY		MEAL	
BREAKFAST			
SNACK			
LUNCH			
SNACK			
DINNER			
DESSERT			

DAY # 15 Siesta Beach HCG/Low Carb Diet	
TIME OF DAY	MEAL
BREAKFAST	CUP OF COFFEE
SNACK	THREE HARD BOILED EGGS
LUNCH	FOUR ROLL-UPS (ROAST BEEF AND WHITE CHEDDAR)
SNACK	WHEY PROTEIN MILKSHAKE (CHOCOLATE)
DINNER	LEMON PEPPER CHICKEN (ENTIRE);SALAD-SPINACH,ETC/BLUE CHEESE
DESSERT	THREE CUPS SUGAR FREE JELLO/SUGAR FREE WHIPPED CREAM

PERSONAL FOOD DIARY:

DAY # 15 Siesta Beach HCG/Low Carb Diet	
TIME OF DAY	MEAL
BREAKFAST	
SNACK	
LUNCH	
SNACK	
DINNER	
DESSERT	

DAY # 16		Siesta Beach HCG/Low Carb Diet	
TIME OF DAY		MEAL	
BREAKFAST		TWO HARD-BOILED EGGS; CUP OF COFFEE	
SNACK		4-BONNE BELL CHEESE	
LUNCH		FIVE ROLL-UPS (TURKEY AND SMOKED GOUDA)	
SNACK		WHEY PROTEIN MILKSHAKE (CHOCOLATE)	
DINNER		LEMON PEPPER CHICKEN	
DESSERT		VANILLA ATKINS SHAKE BLENDED WITH ICE AND 6-8 BLUEBERRIES TOPPED WITH WHIPPED CREAM	

PERSONAL FOOD DIARY:

DAY # 16		Siesta Beach HCG/Low Carb Diet	
TIME OF DAY		MEAL	
BREAKFAST			
SNACK			
LUNCH			
SNACK			
DINNER			
DESSERT			

DAY # 17 Siesta Beach HCG/Low Carb Diet	
TIME OF DAY	MEAL
BREAKFAST	THREE EGGS/BACON; CUP OF COFFEE
SNACK	CHEESE STICK(2)
LUNCH	FOUR ROLL-UPS (HAM,TURKEY AND SMOKED GOUDA)
SNACK	WHEY PROTEIN MILKSHAKE (CHOCOLATE)
DINNER	SONNY'S PIT BARBEQUE-CHICKEN,RIBS, BRAISED BEEF(ALL YOU CAN EAT). MINIMAL SAUCE. NO FRENCH FRIES/SWEET TEA./COLE SLAW
DESSERT	THREE CUPS SUGAR FREE JELLO/SUGAR FREE WHIPPED CREAM

PERSONAL FOOD DIARY:

DAY # 17 Siesta Beach HCG/Low Carb Diet	
TIME OF DAY	MEAL
BREAKFAST	
SNACK	
LUNCH	
SNACK	
DINNER	
DESSERT	

DAY # 18		Siesta Beach HCG/Low Carb Diet	
TIME OF DAY		MEAL	
BREAKFAST	WHEY PROTEIN MILKSHAKE (CHOCOLATE); CUP OF COFFEE		
SNACK	ALMONDS (10)		
LUNCH	FOUR ROLL-UPS (TURKEY AND CANADIAN SHARP CHEDDAR)		
SNACK			
DINNER	BAY SCALLOPS-SAUTEED IN OLIVE OIL/COVERED WITH ROMANO AND PARMESAN CHEESE/3 CELERY STICKS WITH BLUE CHEESE DRESSING		
DESSERT	STRAWBERRY ATKINS SHAKE BLENDED WITH ICE AND FOUR STRAWBERRIES TOPPED WITH WHIPPED CREAM		

PERSONAL FOOD DIARY:

DAY # 18		Siesta Beach HCG/Low Carb Diet	
TIME OF DAY		MEAL	
BREAKFAST			
SNACK			
LUNCH			
SNACK			
DINNER			
DESSERT			

DAY # 19		Siesta Beach HCG/Low Carb Diet	
TIME OF DAY		MEAL	
BREAKFAST		THREE EGGS/BACON; CUP OF COFFEE	
SNACK		CHEESE STICK(2)	
LUNCH		FOUR ROLL-UPS (TURKEY AND SMOKED GOUDA)	
SNACK		WHEY PROTEIN MILKSHAKE (CHOCOLATE)	
DINNER		STEAK-12 OZ;SALAD-SPINACH,ETC/BLUE CHEESE	
DESSERT		VANILLA ATKINS SHAKE WITH RASPBERRIES(5) BLENDED WITH ICE AND TOPPED WITH WHIPPED CREAM	

PERSONAL FOOD DIARY:

DAY # 19		Siesta Beach HCG/Low Carb Diet	
TIME OF DAY		MEAL	
BREAKFAST			
SNACK			
LUNCH			
SNACK			
DINNER			
DESSERT			

DAY # 20 Siesta Beach HCG/Low Carb Diet	
TIME OF DAY	MEAL
BREAKFAST	WHEY PROTEIN MILKSHAKE (CHOCOLATE); CUP OF COFFEE
SNACK	BABY BELL CHEESE, TWO HARD BOILED EGGS
LUNCH	THREE ROLL-UPS (LONDONPORT ROAST BEEF AND HORSERADISH CHEDDAR CHEESE)
SNACK	
DINNER	LEMON PEPPER CHICKEN (ENTIRE CHICKEN)
DESSERT	STRAWBERRY ATKINS SHAKE BLENDED WITH ICE AND FOUR STRAWBERRIES TOPPED WITH WHIPPED CREAM

PERSONAL FOOD DIARY:

DAY # 20 Siesta Beach HCG/Low Carb Diet	
TIME OF DAY	MEAL
BREAKFAST	
SNACK	
LUNCH	
SNACK	
DINNER	
DESSERT	

DAY # 21 Siesta Beach HCG/Low Carb Diet	
TIME OF DAY	MEAL
BREAKFAST	THREE EGGS/BACON/CHEESE ON LOW CARB WRAP; CUP OF COFFEE
SNACK	TWO HARD BOILED EGGS
LUNCH	FOUR ROLL-UPS (TURKEY AND MUENSTER)
SNACK	
DINNER	A POUND OF BAY SCALLOPS-SAUTEED IN OLIVE OIL/COVERED WITH ROMANO AND PARMESAN CHEESE
DESSERT	THREE CUPS SUGAR FREE JELLO/SUGAR FREE WHIPPED CREAM

PERSONAL FOOD DIARY:

DAY # 21 Siesta Beach HCG/Low Carb Diet	
TIME OF DAY	MEAL
BREAKFAST	
SNACK	
LUNCH	
SNACK	
DINNER	
DESSERT	

DAY # 22 Siesta Beach HCG/Low Carb Diet	
TIME OF DAY	MEAL
BREAKFAST	THREE EGGS/BACON; CUP OF COFFEE
SNACK	THREE BABY BELL GOUDA CHEESE PIECES
LUNCH	FOUR ROLL-UPS (TURKEY AND SMOKED GOUDA) OPTION: AVOCADO LETTUCE WRAP
SNACK	WHEY PROTEIN MILKSHAKE (CHOCOLATE)
DINNER	LARGE SALAD-SPINACH,ETC/BLUE CHEESE
DESSERT	VANILLA ATKINS SHAKE WITH RASPBERRIES(5) BLENDED WITH ICE AND TOPPED WITH WHIPPED CREAM

PERSONAL FOOD DIARY:

DAY # 22 Siesta Beach HCG/Low Carb Diet	
TIME OF DAY	MEAL
BREAKFAST	
SNACK	
LUNCH	
SNACK	
DINNER	
DESSERT	

DAY # 23		Siesta Beach HCG/Low Carb Diet	
TIME OF DAY		MEAL	
BREAKFAST	THREE HARD-BOLIED EGGS; CUP OF COFFEE		
SNACK	TWO BABY BEL CHEESE, TWO HARD BOLIED EGGS		
LUNCH	FOUR ROLL-UPS (ROAST BEEF AND SHARP CANADIAN CHEDDAR)		
SNACK	WHEY PROTEIN MILKSHAKE (CHOCOLATE)		
DINNER	A POUND OF BAY SCALLOPS-SAUTEED IN OLIVE OIL/COVERED WITH ROMANO AND PARMESAN CHEESE		
DESSERT	THREE CUPS SUGAR FREE JELLO/SUGAR FREE WHIPPED CREAM		

PERSONAL FOOD DIARY:

DAY # 23		Siesta Beach HCG/Low Carb Diet	
TIME OF DAY		MEAL	
BREAKFAST			
SNACK			
LUNCH			
SNACK			
DINNER			
DESSERT			

DAY # 24		Siesta Beach HCG/Low Carb Diet	
TIME OF DAY		MEAL	
BREAKFAST		CUP OF COFFEE	
SNACK			
LUNCH		SUNDAY BRUNCH RESTAURANT-BACON,CHEESE AND HAM OMELETTE	
SNACK		WHEY PROTEIN MILKSHAKE (CHOCOLATE)	
DINNER		STEAK-16 OZ;SALAD-SPINACH,ETC/BLUE CHEESE	
DESSERT		THREE CUPS SUGAR FREE JELLO/SUGAR FREE WHIPPED CREAM	

PERSONAL FOOD DIARY:

DAY # 24		Siesta Beach HCG/Low Carb Diet	
TIME OF DAY		MEAL	
BREAKFAST			
SNACK			
LUNCH			
SNACK			
DINNER			
DESSERT			

DAY # 25		Siesta Beach HCG/Low Carb Diet	
TIME OF DAY		MEAL	
BREAKFAST		WHEY PROTEIN MILKSHAKE (CHOCOLATE); CUP OF COFFEE	
SNACK		CHEESE STICK(2)	
LUNCH		FOUR ROLL-UPS (TURKEY AND SMOKED GOUDA)	
SNACK		WHEY PROTEIN MILKSHAKE (CHOCOLATE)	
DINNER		STEAK-16 OZ;SALAD-SPINACH,ETC/BLUE CHEESE	
DESSERT		VANILLA ATKINS SHAKE, BLUEBERRIES WITH WHIPPED CREAM	

PERSONAL FOOD DIARY:

DAY # 25		Siesta Beach HCG/Low Carb Diet	
TIME OF DAY		MEAL	
BREAKFAST			
SNACK			
LUNCH			
SNACK			
DINNER			
DESSERT			

DAY # 26		Siesta Beach HCG/Low Carb Diet	
TIME OF DAY		MEAL	
BREAKFAST		THREE HARD BOILED EGGS; CUP OF COFFEE	
SNACK		TWO HARD BOILED EGGS AND TWO CHEESE STICKS	
LUNCH		FOUR ROLL-UPS (HAM AND SMOKED GOUDA)	
SNACK		WHEY PROTEIN MILKSHAKE (CHOCOLATE)	
DINNER		SALAD-SPINACH,ETC/BLUE CHEESE/CRAB MEAT/DICED CHICKEN	
DESSERT		VANILLA ATKINS SHAKE, BLUEBERRIES WITH WHIPPED CREAM AND FIVE RASPBERRIES/WHIPPED CREAM	

PERSONAL FOOD DIARY:

DAY # 26		Siesta Beach HCG/Low Carb Diet	
TIME OF DAY		MEAL	
BREAKFAST			
SNACK			
LUNCH			
SNACK			
DINNER			
DESSERT			

DAY # 27		Siesta Beach HCG/Low Carb Diet	
TIME OF DAY		MEAL	
BREAKFAST	THREE HARD-BOILED EGGS; CUP OF COFFEE		
SNACK	CHEESE STICKS(2)		
LUNCH	FOUR ROLL-UPS (TURKEY AND SMOKED GOUDA)		
SNACK	WHEY PROTEIN MILKSHAKE (CHOCOLATE)		
DINNER	ENTIRE LEMON PEPPER CHICKEN;SALAD-SPINACH,ETC/BLUE CHEESE		
DESSERT	THREE CUPS SUGAR FREE JELLO/SUGAR FREE WHIPPED CREAM		

PERSONAL FOOD DIARY:

DAY # 27		Siesta Beach HCG/Low Carb Diet	
TIME OF DAY		MEAL	
BREAKFAST			
SNACK			
LUNCH			
SNACK			
DINNER			
DESSERT			

DAY # 28		Siesta Beach HCG/Low Carb Diet	
TIME OF DAY		MEAL	
BREAKFAST	CUP OF COFFEE		
SNACK	MACADAMIA NUTS (APPROX 10)		
LUNCH	FIVE ROLL-UPS (ROAST BEEF AND HORSERADISH CHEDDAR)		
SNACK	WHEY PROTEIN MILKSHAKE (CHOCOLATE)		
DINNER	STEAK-12 OZ;SALAD-SPINACH,ETC/BLUE CHEESE		
DESSERT	VANILLA ATKINS SHAKE WITH RASPBERRIES(5) BLENDED WITH ICE AND TOPPED WITH WHIPPED CREAM		

PERSONAL FOOD DIARY:

DAY # 28		Siesta Beach HCG/Low Carb Diet	
TIME OF DAY		MEAL	
BREAKFAST			
SNACK			
LUNCH			
SNACK			
DINNER			
DESSERT			

APPENDIX 2

THE RESEARCH BEHIND THE HCG BENEFITS

Reviews of HCG research

The overwhelming skepticism generated by most academic and government sponsored studies seems to be matched by HCG's overwhelming commercial success and, like most practitioners who believe in its value, I accept that the reported trials and literature to date do not seem to substantiate the clinical experiences of so many physicians and patients. So why is that? Most of the studies involving HCG date back to the 1960's and 70's.

My experience as a clinical researcher

I wrote this section to carefully investigate all the research that has been performed about HCG and to demonstrate that the studies that so strongly state that HCG has no benefit, are actually poorly done, and fail to examine the complexities of weight loss studies. My background in research includes winning national awards for my clinical research, publishing numerous research articles, participating as a Primary investigator in numerous International and National Clinical trials, as well as a secondary investigator in many other clinical trials. So when I sit down to read a study, I don't just read the results like many individuals who have commented on the lack of benefit of HCG. I read how the study was completed, the proper use of statistical evaluation, and many other complexities of a research trial. And when I read how the studies were done evaluating HCG, and how they made sweeping comments about how HCG was not beneficial, when in fact it was, I decided to devote many hours to completely evaluating how poorly these studies were done.

One of the major benefits of HCG is that it controls your appetite, resets your hypothalamus, and allows one to tolerate a very low calorie diet. In a number of these studies, the drop-out rate was twice that of the patients using the HCG. And the researchers never included that very pertinent fact in their conclusions. We now know that leptins, which are stimulated by HCG, tell your brain that you are not hungry. That is an important concept and benefit when using HCG for weight loss. This chapter, and the next, which will describe the extensive literature supporting the benefits of the low-carbohydrate approach, have been included so as to provide a reference

base for those who want to see “the real data.”

Long term benefits of HCG— 1977

Dr. Patrick Bradley of Sydney Australia commented in a letter in 1977, in regards to his assessment of the failure of present research identifying the benefits of HCG by saying “These researchers assumed a simple anorectic effect, ignored the possibility of generalized energy conservation by HCG, failed to observe the critical immediate post-treatment procedures, generally ignored Simeons’ empirical rules, and neglected any long term follow-up.” These statements concisely identify the downfalls and failures of studies to identify the benefits of the use of HCG and an HCG weight loss protocols.

Dr. Bradley reviewed the Craig trial and examined long term benefits to patients six months post study. In the HCG group, 14% gained some weight while 86% lost on average 12.5 lbs more. Placebo group: 57% regained weight, 75% of those became heavier than prior to the VLCD. This fact supports the long term weight loss benefits of the HCG approach.

Stein study (1976)— a negative study that is really positive

Stein et al. published a paper entitled “Ineffectiveness of human chorionic gonadotrophin in weight reduction: a double-blind study” in the American Journal of Clinical Nutrition 29: 940, 1976.

The authors were attempting to retest great study performed by Asher and Harper, this study, a well-designed double blinded randomized trial proved that HCG was effective in weight loss through a HCG protocol. The Stein study was performed entirely on a military base and was funded by our Department of Defense. Unfortunately as rigid as they insist their protocol was, they made no attempt to reduce bias by other critical factors that are known to contribute greatly to the success of weight reduction programs. They created an environment of support and powerful peer pressure within the clinic that they briefly alluded to in the results but they deemed unimportant. We know that Studies suggest that well motivated commercial weight watchers’ groups have twice the weight loss obtained by hospital outpatients on the same diet. In this study, higher ranking officers required the participants to appear together at the clinic half-dressed at the same time for an objective evaluation and review of their subjective symptoms, which would undoubtedly yield similarly invalid results. But in truth, the result were statistically different, but reported the same! Looking at the presence of no hunger versus having some degree of hunger, I performed statistical analysis, non-matched T-test, of the Hunger responses that were recorded as “None.” Careful recordings were performed 6 days a week in the clinic, and in the HCG group 149 of 791 patients stated they had absolutely no hunger. In the placebo group, despite all the peer pressure, 74 of 722 stated they had no hunger. Stein et al stated that there was no difference,

but in fact there was a statistically significant difference between the two groups ($t= 5.07$, $p< .0001$). Why they chose to disregard this point is unclear. But they make the statement that there was no reduction in hunger index (but there was), and this is one of the keys to effective weight loss using HCG. The placebo group also contained twice as many patients exceeding over 60 pounds their ideal weight, thus numerically a higher weight loss will be seen in these patients. The other important facet which was ignored by this trial is whether there was any long-term difference in the maintenance of the new weight levels between the two groups. This is probably the most important issue of all. So the Stein et al study was considered a negative study in regards to the benefits of HCG, but all studies and the data included aren't necessarily negative— and the Stein study, albeit called negative, is actually quite positive— the losses achieved in 28 doses make 3 “diet drugs” in phase 3 trials currently look like candy ... and no side effects like the disasters of Fenfluramine and dexfenfluramine, and, Meridia which increase cardiac risks.

Craig Study 1963— the results are physiologically impossible

Craig, L. S., Ray, R. E., Waxler, S. H. and Madigan, H. Chorionic gonadotrophin in the treatment of obese women. *Am. J. Clin. Nutr.* 12: 230, 1963.

The Craig study , an NIH sponsored study, was published in 1963, when the HCG diet's popularity was high. The researchers at University of California, San Francisco, attempted to comply with the HCG protocol outlined by Simeons, except they had no documented unlimited diet after initiation of the HCG injections was noted. Only giving the patient two meals, they provided a baked potato for each morning meal, packed with carbohydrates, which certainly isn't even discussed or included in the Simeons' diet. So why did they do that? The final result of the study was maintaining a starvation diet of 550 kcal for forty consecutive days, and using HCG, but only losing 6 pounds of weight, and in one patient they actually gained weight. This is physiologically impossible! In addition neither the treatment nor the placebo group came close to the anticipated weight loss seen in other studies. There is a major concern about compliance in this diet approach and the investigators carefully dodged that discussion in this study of 20 patients. The study is not only weak, but has so few patients that making any deductions are extremely difficult. However carefully examining there 6 month follow-up data, in comparison to their 6 month pre-treatment data (removing patients who had lost weight prior to the study), a clear pattern of successful weight loss and maintenance of weight loss was noted in the HCG group. In the 6 months following HCG injections only one out of seven of the HCG group gained weight and the other six went on to lose an average of a further 12.5 pounds. In sharp contrast, in the placebo group, four out of the seven regained weight in the 6 months after the injections and three of those four were heavier than when they started the injections. This fact supports the long term weight loss benefits of the HCG approach. Dr. Craig summarizes the problems with her

study by saying:

The difficulties in carrying out a controlled investigation in any group of clinic patients are well known; these problems are multiplied in studies on obese subjects due to the many variables, including the psychological factors, involved. Our subjects' cooperation was not entirely adequate, and tests were not completed in all cases. For this reason and because of the heterogeneity and small size of the experimental group, only tentative conclusions can be drawn from our data.

But despite her inadequacies with her own study, she makes the bold statement: "No effect of chorionic gonadotropin therapy in producing weight loss was found in a study on a group of twenty obese clinic patients." This is amazing since the results are worthless, the study poorly designed and it is quite clear that prior to the study she had made up her mind that HCG was ineffective, and so she makes this worthless determination. And this is one of the landmark articles that supports the philosophy that HCG is ineffective. I have done clinical research for over for 28 years, and this study was not worth even publishing.

Captain Frank 1964

Captain Frank of the US Army completed his study: THE USE OF CHORIONIC GONADOTROPIN HORMONE IN THE TREATMENT OF OBESITY. A DOUBLE-BLIND STUDY. In 1964.

His study has very little resemblance to Simeons' study in caloric intake, and dosage of HCG. However his main goal is to debunk Simeons' protocol. His diet, an exchange diet of 1000 calories, is specifically packed full of carbohydrates (133 grams of carbohydrates in the 1030 calorie diet). The HCG regimen is so altered that that it would be unlikely to expect any benefit of HCG on weight reduction and tolerance of a low calorie diet. We know that about 80 per cent of injected human chorionic gonadotropin is inactivated in the body within 24 hours. Therefore anything less than daily doses would prove to be of no benefit. The daily dosing reproduces the uninterrupted physiological action of human chorionic gonadotrophin in pregnancy, which appears to have the greatest impact on reducing abnormal fat deposits. Most obese patients can usually get along well on a 1,000 cal. diet without further assistance and this study proved that, but proved nothing about reducing appetite and feeling good while eating only 500 calories. There was no difference in the mean weight loss between the groups, (11.5 to 12.3). Please explain how a 308 pound man, who eats 1000 calories a day for 54 days with a caloric deficit exceeding 75,000 calories, can lose only 4 pounds. If you have any question about patients sticking to the diet in this study, then you should know that there was no way they did, and the results are worthless!

To what extent the psychological effect of seeing the treating physician, a military physician who outranks you, being weighed and having an injection daily plays a role on how well a patient tolerates a low calorie diet even without HCG is unclear. Unfortunately most patients involved with HCG or tolerating a low calorie diet, are on their own during the week, and even if seen weekly, are not under the direct influence of a commanding officer. I believe that is where HCG makes its biggest difference. It helps patients tolerate a lower calorie or lower carbohydrate diet better, helps them feel better and allows them to comply with the scheduled diet. Military studies like this one, and Stein's represent an artificial situation, where a patient trying to lose weight is seen daily by ranking officers, and this encouragement may allow them to comply more strictly with the diet, although in Captain Franks study there is still a significant concern of lack of compliance, although much better weight loss when compared to Craig's study were the average weight loss was 6 pounds.

HCG in the Treatment of Obesity— A Critical (should be a worthless) Assessment of the Simeons' Method

Human Chorionic Gonadotropin (HCG) in the Treatment of Obesity— A Critical (should be worthless) Assessment of the Simeons' Method. Frank L. Greenway, MD, and George A. Bray, MD, Torrance, California. West J Med 127:461–463, Dec 1977

This study at least attempted to approach the dosing regimen used by Simeons, with a six week schedule of 6 days a week. But that's where it stops. They don't even tell you how much HCG they are using. In assessing hunger they asked them the first day and then 6 weeks later if they were hungry during the study. So basically all the data represented for hunger, depression, anxiety etc. is essentially worthless. Why not measure these at least weekly with weights or even better at the time of the daily injections. Again a worthless piece of information. During treatment, the dropout rate for the placebo was 350% higher than for the HCG treated group, presumably because they could not tolerate the 500 kcal diet. And so a better way to put this is there was a 3–4 fold improvement in tolerance of the diet. That is certainly a significant benefit of using HCG by the way. The hunger data collected was worthless, but the data indicating the drop-out rate was 35% in the placebo group, versus only 10 % in the HCG group suggests that non-HCG group poorly tolerated the diet and then quit. Again , another worthless negative study, and it was paid for by the government as well (NIH grant)

ASHER AND HARPER 1973

Asher WL, Harper HW: Effect of human chorionic gonadotrophin on weight loss, hunger, and feeling of well-being. *Am J Clin Nutr* 1973; 26: 211–218.

This study was well designed and closely adhered to Simeons' HCG protocol, in contrast to Craig's 1963 study. This study was initiated by the American Society of Bariatric Physicians Research Council and examined twice the number of patients than the 1963 Craig study. This was an extremely well designed study, that closely monitored the compliance of patients (unlike almost every negative study preceding this study). The final results were a compelling six week weight loss in the HCG group of 19.96 pounds versus 11.05 pounds in the control group. How could the Greenway study only achieve a 8 pound weight loss and Craig's study a 6 pound weight loss on 500 calories a day ... because they didn't "stick" with the diet. The drop out rate in the HCG group was 15% and in the control group 35%, similar to the Greenway trial supporting that the HCG group tolerated the diet better than the control group. And the ability to tolerate a very strict diet like this is difficult, but again has been shown in a second trial that HCG improves patients maintaining their diet. With the HCG, the study proves that patients tolerate the 500 kcal diet better, are less hungry, and have an improved feeling of well-being. A comment in the paper suggested that the authors were surprised by the results of the study, because using a very loose diet protocol that had shown no benefit. (I wondered if that was the only way they could get funding for this study, was by stating they felt there was going to be no benefit to the HCG, much like the University of Cincinnati study looking at the benefits of a low-carbohydrate diet). This study was unjustly criticized because they included all patients who initially enrolled in the trial, and this resulted in less of the placebo getting injections because over a third of them dropped out because of intolerance of the diet. Now isn't that what we were really looking at? Didn't we want to know if HCG would improve the ability of a patient to "stick" with the diet. I think that is a very important point, and one explaining why previous studies like Greenway's never identified the importance of HCG in keeping patients satisfied, because the patients who couldn't "stick" with the diet were removed from the final evaluation of HCG. Ascher and Harper in a rebuttal letter explained why including all the patients from the beginning of the study was critical.

Too often, in studies of the treatment of obesity, dropouts are excluded from final analysis with the investigators frequently justifying this action by stating they are "uncooperative." Stunkard and McLaren-Hume and Albrink made appeals for an analysis of all starting patients. Of the most importance is the impact of a treatment modality on all starting patients rather than those finishing treatment. If a patient drops out because there are side effects from an active drug or lack of effect from a placebo, this is important. This was our reason for considering all starting patients in our analysis. Considering the randomization and the study design, the variable most apt to be causative in the increased weight loss appears to be the HCG.

There's your scientific evidence: they're clearly mixed, several showing no benefit (other than the weight loss) two showing significantly better results over placebo. If you want to use a term such as "overwhelmingly negative" at least that'd be honest but to continually throw out superlatives which are factually incorrect is wrong. a meta-analysis combines the results of several studies that address a set of related research hypotheses. In Clinical/anecdotal/empirical evidence: Average loss in 30 days of 9.5–14% of starting body weight for over 85% of participants, 600 people and 18,000 lbs lost. That IS evidence. It ISN'T "scientific proof" via DB study.

Going from the abstract of the meta-analysis anyone would have a negative view on HCG but I'd expect better from someone with experience at UC Davis.

Utility of an oral presentation of hCG Human Choriogonadotropin for obesity treatment:

A Double-Blind study. Daniel O. Belluscio MD, Leonor E. Ripamonte MD

The result of this study suggests that oral administration of HCG , in the course of a Very-Low-Calorie Diet (VLCD), significantly decreases the total amount of subcutaneous body fat from specific deposits of fat. a series of studies maintaining that weight loss was similar both in the Placebo and HCG-treated groups. Our study corroborates those previous findings.(2,7, 14,15, 26, 32, 35,36,41).

However, all the the reports on the subject of HCG and obesity are not negative: studies from Asher WL, Harper HW, Bradley P., Bradley P., Gusman HA, Komarnicka R, et al., Vallini A, et al, Veilleux H, et al., suggest that HCG exerts a lipid-mobilizing action.

At 8 mo. post-treatment, more of the HCG-treated patients maintained their weight reduction than their placebo-treated counterparts ($p < 0.003$).

SABINE LIJESSEN criteria-based meta-analysis 1995

The effect of human chorionic gonadotropin (HCG) in the treatment of obesity by means of the Simeons' therapy: a criteria-based meta-analysis. G. K. SABINE LIJESSEN, IRIS THEEUWEN, WILLEM J. J. ASSENDELFT & GERRIT VAN DER WAL Institute for Research in Extramural Medicine, Faculty of Medicine, Vrije Universiteit, Amsterdam and Medical Inspectorate of Health for North-Holland, Haarlem, The Netherlands *Br J Clin Pharmacol* 1995; 40: 237–243

Meta analysis is a statistical comparison of multiple studies on the same topic. Published in the *British Journal of Clinical Pharmacology* in 1995, by researchers at Vrije University,

Netherlands, They evaluated 46 studies and observed that most of them were of ‘poor methodological quality’. Only two of the 14 randomized articles of acceptable quality showed an effect on weight loss by HCG. But there were two. The researchers concluded that ‘there is no scientific evidence that HCG is effective in the treatment of obesity’.

Meta-analysis studies have become very popular in medicine because the philosophy of a trend over multiple studies is an absolute truth (And this is what LIJESSEN implies robustly despite two positive studies). Unfortunately, the basic rules of statistics invalidate any such comparisons. Importantly, when even one study (much less two) stand out against the majority, it is not correct, nor accurate to ignore it completely as LIJESSEN and associates did. It would have been more important and clinically valuable to determine why some studies gave contradictory results. And careful examination of each study, including which diet modification, if they used all patients beginning the study, and if patient compliance to the diet was acceptable would have given more accurate information, but that was not done.

The study uses parameters like retention in determining good quality studies, In the Stein study there is a 20% drop-out rate despite the tremendous support, daily doctor evaluations, and the comradery of everyone in the study being seen on a daily basis. Does this sound like a normal weight loss program? How can we make determinations on an individual patient, who often has to deal with cravings, compliance with the diet, with a group that is seen daily. This study only shows that seeing patients daily, and having a group of 40 plus people working together as a common goal is a successful format for a weight program. In addition, having a commanding military officer telling you what to eat is also a component of reinforcement for this study and the low calorie diet. This study really says nothing about HCG, so using it as the “best” study in the negative bracket for HCG use is bordering on absurd, And to make some final statement like: “Pharmacists and physicians should be alert on the use of HCG for Simeons’ therapy. The results of this meta-analysis support a firm standpoint against this improper indication ... ”

These restraints on physicians practicing is so unfounded and lacks any real insight by the meta-analysis investigators that I question if they even accurately read the articles they supposedly evaluated, or did they only look for “protocol” information only.

In addition, information on hunger ratings was significant when you look at Stein’s study, as well as the higher dropout rate in the studies were they did not include individuals in the placebo group, (who obviously dropped out because they weren’t tolerating the diet) in the total analysis. Another hunger assessment included as “a quality study” was looking at tolerance of the diet the day they started and six weeks later. Of course they neglected to interview the patients dropping out because of uncontrolled hunger as they only looked at the patients completing the program ... and asking them to recount their experience over the 6 weeks. Now that’s poor methodology and just worthless information.

The meta-analysis in the British Journal of Pharmacology supposedly examined all of the research on HCG concluding that “there is no scientific evidence that HCG is effective in the treatment of obesity; it does not bring about weight loss or fat redistribution, nor does it reduce hunger or induce a feeling of well-being.”

Failure to identify patients dropping out of a study

Again they fail to separate the placebo group drop-outs and consider them as intolerant to the program. Doing that, as well as examining the Stein data that shows a dramatic reduction in appetite, they would not have been so bold in making their inaccurate assessment. I also find it interesting that they make allegations that the HCG-Simeons protocol doesn't work, but essentially none of them actually reproduced the diet as accurately as the positive Ascher study. In fact one study provided only two meals and gave the patients a carbohydrate loading baked potato for breakfast. Why bother doing the study if they don't accurately evaluate the diet, monitor the patient compliance to the diet, and record patients failing the diet because they couldn't tolerate it without the HCG? I also noted that using predefined criteria they removed most of the positive studies, keeping only two, and not using the data in the second one. Interestingly, they report that most of the 46 studies examined were of poor methodological quality, and it just so happens that probably most of the studies thrown out were positive HCG studies. Of the remaining 24 examined, there were only 2 that were deemed positive. So, essentially the study was really designed to only qualify negative trials, and to support the authors pre-existing impressions and goals. PhD Researcher Dr. Dennis Clark summarizes his feelings on this meta-analysis study by LIJESSEN'. “This meta-analysis also reveals what I call the dirty laundry of medical science— i.e., most research is so flawed that it is almost useless for saying anything at all with certainty. In fact, this is kind of a scary thought, isn't it?” I agree, and purposeful misrepresentation of results suggesting no benefit to HCG in weight loss makes me question the funding and ultimate goals for their trials (biggest trials were through the Military and Government sponsored).

Lastly, they imply no real mechanism for why HCG works. I'm not as critical in this assessment, as these trials were in the 60's and 70's and no one knew much about leptin, and its effects on the hypothalamus and appetite suppression. We know it now, and the facts show that HCG will increase leptin production, and reduce one's appetite. We also know more about the physiology around conception, and therefore understand why this low dose of HCG-200 units, versus levels ranging from 17,000 to 70,000 during pregnancy, cause the body to rely on the fat deposits for nutritional support.

C. LAIRD BIRMINGHAM— worthless, misleading and unfounded comments
Human chorionic gonadotropin is of no value in the management of obesity. C. LAIRD
BIRMINGHAM, CAN MED ASSOC J, VOL. 128, MAY 15, 1983

I felt compelled to add this article in the Canadian Medical Association Journal by Dr. Birmingham. His initial comments, and finally words of warning are not only unfounded but have a scent of theatrics. He stated: “We condemn, in terms that cannot possibly be misconstrued, such use of HCG.”

Because HCG “therapy” in the management of obesity has been thoroughly discredited and thus rejected by the majority of the medical community, any practitioner whose patients experience undesirable side effects as a consequence of such therapy may face civil and even criminal liability. I suspect Dr. Birmingham had his weight loss patients on Fen-Fen and Meridia, both have which been shown to have very dangerous side-effects. But of course in throwing around terms like Ovarian Hyperstimulation, he fails to even note that these occur exclusively in patients receiving very high dose (5,000 to 25,000 in one dose) HCG for infertility, not low dose HCG (125–300 units daily) for weight loss. In fact, one study described using a lower dose of 2500 found that Ovarian Hyperstimulation was significantly reduced. So therefore using the HCG weight loss regimen, one should actually see a reduction in Ovarian Hyperstimulation syndrome. Birmingham is irresponsible when he throws in terms like severe ovarian hyperstimulation syndrome (OHSS) which is actually very rare but potentially fatal condition associated with conventional in vitro fertilization, and reduced with doses even higher than those used in weight loss. He also talks about complications of the use of HCG in fertility such as increased number of pregnancies, ascites with ovarian hyperstimulation, blood clots, etc., NONE described with HCG therapy in any of the studies in women. He is trying to frighten people by listing these complications, but they have nothing to do with the very low doses used in weight loss, but only in the very high doses (200 units versus 25,000 units) used in infertility. This angers me because he purposeful muddies the water with inaccurate facts and then sounds so righteous in his deductions. And finally he is so quick to discredit the Asher study because the treatment group received more shots, but what he didn’t take the time to examine is that the Asher study appropriately included all patients beginning the trial, so that one could more accurately assess the true drop-out rate we see so commonly in weight loss attempts. In numerous trials there was a dramatic reduction in drop-out rates among patients receiving the HCG shots, which supports the findings that patients are able to tolerate a low calorie diet better than without HCG.

2010 study offers more evidence that HCG does work

A recent 2010 study Inside Bariatrician (a journal published from the American Society of Bariatric Physicians) offers more evidence that HCG does work: Subjects put on the dietary plan

lost 30 percent more than counterparts who were put on a conventional meal-replacement plan, dropping an average of 20 pounds (and as much as 37 pounds) in five to six weeks. In the group studied, the patients receiving HCG lost between 10 and 37.2 pounds over a six week period with an average weight loss of 19.84 pounds. The conventional meal replacement group (without HCG) lost between 6.4 to 19.8 pounds with an average weight loss of only 14.75 pounds ($p < .01$), representing significant more weight loss with the HCG group.

Professor of Cardiothoracic Surgery Questions Quality of Past Research

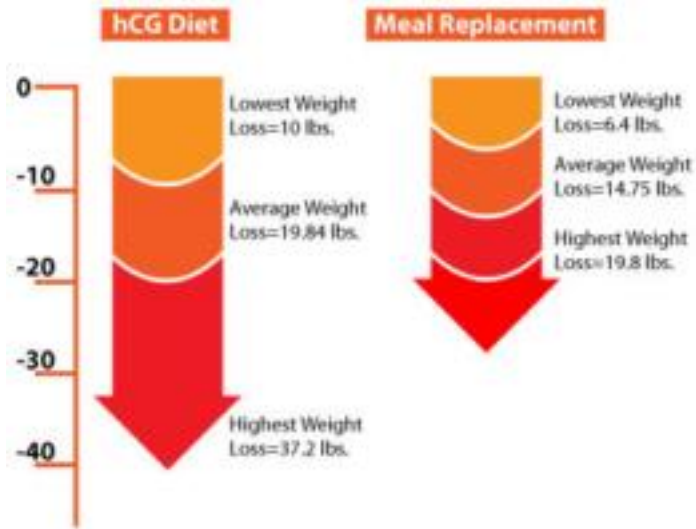
Dr. Mehmet Oz, a cardiothoracic surgical colleague of mine, commenting about the FDA's warning stated: "I utterly trust what the FDA says." Dr. Oz voicing his concern about the obesity epidemic and numerous very positive results prompted him to re-examine the approach. "I recognized there are some real legitimate folks out there who seem to be successful with this particular diet. I got curious," he was quoted saying while making a recent appearance on ABC's Good Morning America. "Is it possible there's truth to what is happening with this HCG diet protocol which may throw open a vista of opportunities for all of us and help the numerous Americans who want to lose fat?" Dr. Oz, like me, is extensively trained in research and research protocols. I am sure he examined the negative articles published, and immediately, just like myself, identified numerous major downfalls in the studies, which make their determinations invalid and essentially worthless when attempting to determine the benefit of using HCG. Dr. Oz and I also adamantly agree that the use of the homeopathic drops, with no measureable HCG, should not use the HCG literature and Simeons' HCG protocol, as the drops contain no HCG. Previous studies have been careful in actually delivering doses of HCG via an injection or orally, whereas the homeopathic drops don't have any HCG, and if they even did have any amounts when first manufactured, it would be unlikely that months and years later sitting at room temperature ... or higher, that the sensitive HCG hormone would still even be intact.

As Dr. Oz emphasizes, and I agree completely, that a good HCG program isn't just about the hormone, but more important about close medical supervision and a medical work-up during the weight loss regimen. There should be no reason that a month therapy with follow-up and evaluation should exceed \$250.

New Trial Confirms the Benefits of HCG with Weight loss

People who have commented on demanding a new study evaluating HCG, should look at the new trial reported by the American Bariatric Society, however as I have cited throughout this assessment of the literature, there is tremendous difficulty creating and evaluating the results of a nutritional weight loss program, and that all patients entered into the trial should be included in

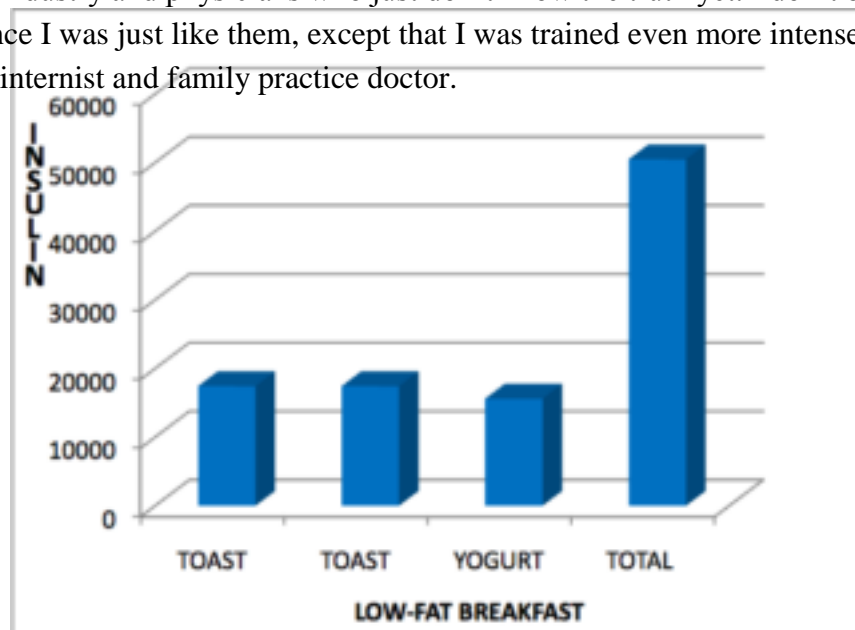
the final determinations, as they truly represent the common incidence of failure to maintain a weight loss program that is so prevalent in society today, but is something that HCG will improve, as patients appear to tolerate the diets better with the use of HCG.



APPENDIX 3

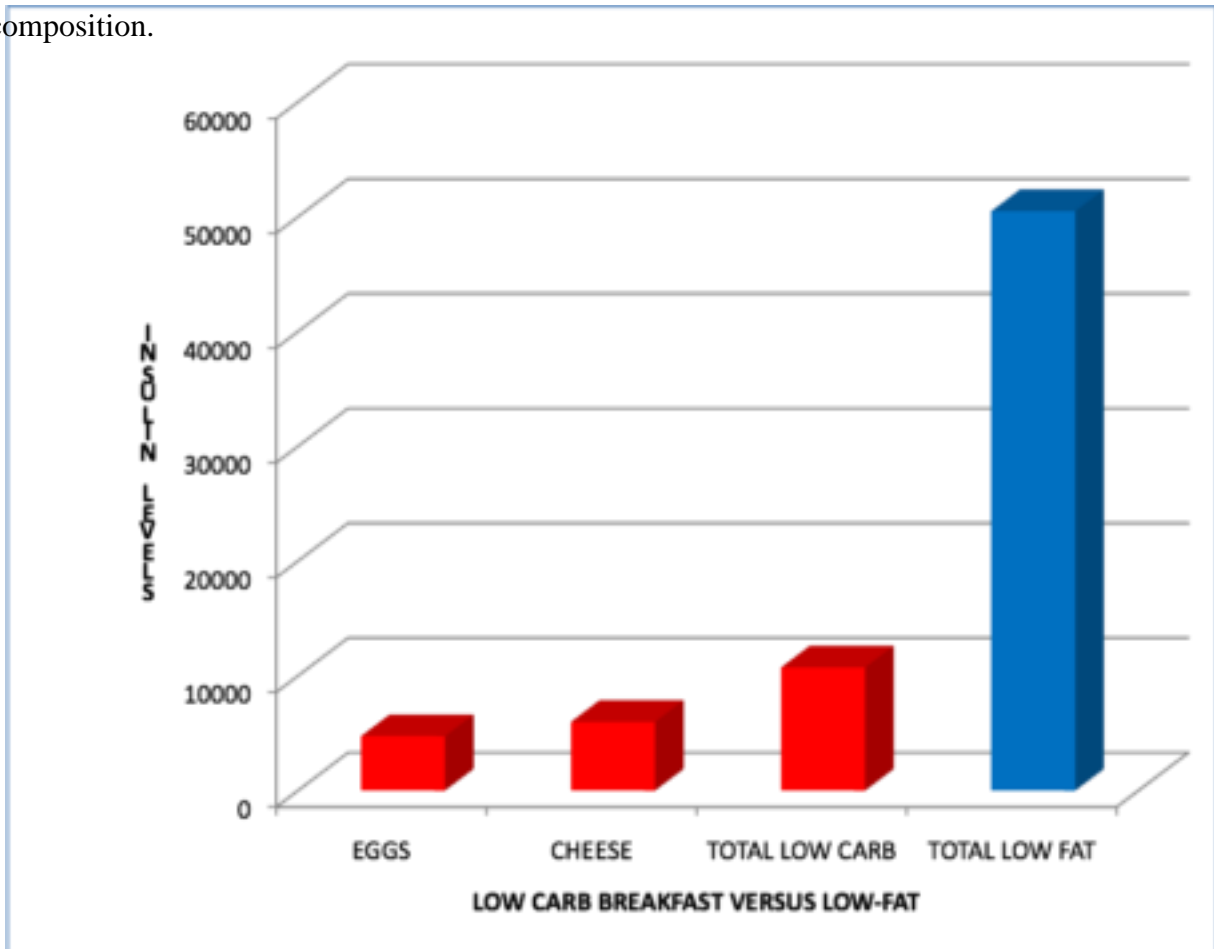
LOW-CARBOHYDRATE RESEARCH ARTICLES

I recently spoke with a patient, who has been doing very well incorporating his low-carbohydrate diet to a lifestyle. Recently he stated on Facebook, that he was going to continue with his low-carbohydrate approach, since it was working so well for him losing over 30 pounds. The ridicule from his friends was alarming. They all stated how bad eating meat was. And that carbohydrates and grains are absolutely necessary. The bottom line is they are NOT. Low-carbohydrate lifestyle and approach to eating, will reduce your inflammatory markers of heart disease and cancer, lower cholesterol, triglycerides, glucose levels, and help you lose weight. That is what the studies show and it is proven. It is an uphill battle, as so many people have been brainwashed by media, big industry and physicians who just don't know the truth yet. I don't blame the physicians, since I was just like them, except that I was trained even more intensely in nutrition than the basic internist and family practice doctor.



Above, is a graph demonstrating the amount of insulin that spikes when consuming a standard

low-fat diet. Knowing that spiking insulin will force your body to store more fat, and block any attempts by your body to release fat stores, this diagram clearly depicts how high your insulin levels spike with a low-fat (high sugar) diet. In contrast, the following image shows that consuming a low-carbohydrate diet will not cause the massive elevation of insulin seen with the low-fat diet. By keeping insulin levels low with the low-carbohydrate diet, the body is able to release fat stores and allow the patient to move towards effective changes in their body composition.



As a heart surgeon, I trained and completed numerous marathons, and even finished three ironman competitions, so I had to continue to focus on nutrition and exercise even after my surgical training. But even I couldn't explain to others why a low-carbohydrate diet will reduce cholesterol levels and inflammation. Of course eating fat causes fat. But that's not the truth. Eating sugar and high fructose corn syrup causes the development of fat and elevated cholesterol and inflammation. And that the low-fat diet, with high sugars, actually causes spiking insulin levels that direct your body to store more fat, as well as blocks any effort of your body to burn and get rid of fat.

To support my discussion, I want to provide you with the documents that prove the low-carbohydrate approach is not only safe, but it's very healthy for you, reducing diabetes, obesity, heart disease, and even cancer.

Effects of a high-protein ketogenic diet on hunger, appetite, and weight loss in obese men

Effects of a high-protein ketogenic diet on hunger, appetite, and weight loss in obese men feeding ad libitum. AM Johnstone et al. Division of Obesity and Metabolic Health. Am J Clin Nutr January 2008 vol. 87 no. 1 44–55.

(My comments about each article are in bold italics)

This study examines the benefits of a low-carbohydrate diet, less than 20 grams a day, versus one exceeding 150 grams. The Low-carbohydrate diet promoted reductions in fasting glucose and insulin concentrations and improve insulin sensitivity, as has been previously shown.

Marked reduction in appetite associated with the low-carbohydrates, improved tolerance and weight loss. There were some concerns previously cited about the safety and efficacy of high-protein diet that promotes ketosis. (don't be confused with ketoacidosis, as they are very different). However this study identified that a low-carbohydrate diet is safe and that a low-carbohydrate approach could be used to achieve considerable weight loss to improve mortality and morbidity in obese patients.

An article presenting and discussing the Atkins diet in WebMD was a perfect example of poor writing, condescending rhetoric and ongoing promotion that the Atkins approach is a fad diet.

The writer of this article, who remains anonymous, should be ashamed of himself. He finalizes his dysentery; I mean discussion about the Atkins approach with low-carbohydrate diet by stating: "The Atkins theories remain unproven, and most experts are concerned that a high-protein, high-fat diet can cause a host of problems, particularly for the large segment of the population that is at risk for heart disease." Unfortunately he forgot to read the literature before writing this piece. The literature clearly states the opposite. It states that the low-carbohydrate approach is by far superior to the low-fat approach in weight reduction, reduction of triglycerides, cholesterol and most importantly the inflammatory markers that correlate the strongest with the development of heart disease. Only one year ago there was a review of 13 separate well designed randomized controlled trials comparing low-carbohydrate vs. low-fat/low-calorie diets in the management of obesity. In all of the trials, the Atkins diet was by far the best!! In fact were significant differences between the groups for weight loss, high-density lipoprotein cholesterol levels , triglyceride levels and the reduction of systolic blood pressure, ALL favoring the low-carbohydrate diet. A 2007 study performed by the NIH

(National Institute of Health) in conjunction with Stanford University found that the Atkins diet resulted in the most weight loss, and most beneficial metabolic improvements (lower total cholesterol, LDL cholesterol, blood sugar levels) when compared to the Zone diet, LEARN diets, and the Ornish diets. Interestingly, the Atkins was the ONLY diet of this group that was not based on limiting calories, starvation and deprivation, but focused on choosing the correct nutrient dense foods that would allow the feeling of fullness, while still burning fat. The goal for the low-carbohydrate approach is to switch the body from burning carbohydrates, to burning primarily fat for energy.

The glycemic index issue.

Brand-Miller J, Buyken, AE

School of Molecular Bioscience and Boden Institute of Obesity, Nutrition and Exercise, University of Sydney, Sydney, New South Wales, Australia Research Institute of Child Nutrition, Rheinische Friedrich-Wilhelms-Universität Bonn, Dortmund, Germany. Curr Opin Lipidol. 2011 Dec 12. [Epub ahead of print]

In recent years, many of the concerns surrounding the glycemic index have been addressed by methodological studies and clinical trials comparing diets carefully matched for other nutrients. These findings are reviewed together with new observational evidence for the role of the dietary glycemic index in the etiology of cardiovascular disease.

The determination and classification of the glycemic index of a food product is now standardized by the International Standards Organization. Systematic studies using isoenergetic single and mixed meals have shown that glycemic index and/or glycemic load is stronger predictors of postprandial glycemia and insulinemia than carbohydrate content alone. In overweight individuals, a diet that combined modestly higher protein and lower glycemic index carbohydrates was the most effective diet for prevention of weight regain. New observational studies have reported increased risks of coronary heart disease associated with higher intakes of carbohydrates from high glycemic index foods. Epidemiological evidence has emerged linking dietary glycemic index to visceral fat and inflammatory disease mortality.

SUMMARY:

There is growing recognition that replacing saturated fat with refined, high glycemic index carbohydrates increases postprandial glycemia (elevated blood glucose levels) and may be

detrimental for weight control and predisposition to cardiovascular and inflammatory disease. In contrast, low glycemic index carbohydrates reduce risk.

This evaluation confirms the dangers of the low-fat diet, and the insulin spiking and elevated

sugars associated with that diet which despite being called low-fat, actually is a very high sugar diet. Low-carbohydrate diets will not only be more effective in losing weight, but also will significantly reduce the inflammatory processes that promote heart disease, diabetes, and cancer. Just say "NO" to the low-fat diet because it is making you fat, and increasing your risks of heart disease.

PMID:22157060

A carbohydrate-restricted diet during resistance training promotes more favorable changes in body composition and markers of health in obese women with and without insulin resistance.

Kreider RB, Rasmussen C, Kerksick CM, Wilborn C, Taylor L 4th, Campbell B, Magrans-Courtney T, Fogt D, Ferreira M, Li R, Galbreath M, Iosia M, Cooke M, Serra M, Gutierrez J, Byrd M, Kresta JY, Simbo S, Oliver J, Greenwood M. *Phys Sportsmed*. 2011 May; 39(2):27–40.

Source

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Abstract

Objective: To determine whether sedentary obese women with elevated levels of homeostatic model assessment (HOMA) insulin resistance (ie, > 3.5) experience greater benefits from an exercise + higher-carbohydrate (HC) or carbohydrate-restricted weight loss program than women with lower HOMA levels. **Methods:** 221 women (age, 46.5 ± 12 years; body weight, 90.3 ± 16 kg; body mass index, 33.8 ± 5 kg/m²) participated in a 10-week supervised exercise and weight loss program. The fitness program involved 30 minutes of circuit-style resistance training 3 days per week. Subjects were prescribed low-fat (30%) isoenergetic diets that consisted of 1200 kcals per day for 1 week (phase 1) and 1600 kcals per day for 9 weeks (phase 2) with HC or higher protein (HP). Fasting blood samples, body composition, anthropometry, resting energy expenditure, and fitness measurements were obtained at 0 and 10 weeks. Subjects were retrospectively stratified into lower (LH) or higher (HH) than 3.5 HOMA groups. Data were analyzed by multivariate analysis of variance with repeated measures and are presented as mean ± standard deviation changes from baseline. **Results:** Baseline HOMA levels in the LH group were significantly lower than those in the HH group (LH, 0.6 ± 0.7; HH, 6.3 ± 3.4; P = 0.001). Diet and training significantly decreased body weight (-3.5 ± 3 kg), fat mass (-2.7 ± 3 kg), blood glucose (-3%), total cholesterol (-4.5%), low-density lipoproteins (-5%), triglycerides (-5.9%),

systolic blood pressure (-2.6%), and waist circumference (-3.7%), while increasing peak aerobic capacity (7.3%). Subjects in the HP group experienced greater weight loss (-4.4 ± 3.6 kg vs -2.6 ± 2.9 kg), fat loss (-3.4 ± 2.7 kg vs -1.7 ± 2.0 kg), reductions in serum glucose (3% vs 2%), and decreases in serum leptin levels (-30.8% vs -10.8%) than those in the HC group. Participants in the HH (-14.1%) and HP-HH (-21.6%) groups observed the greatest reduction in serum blood glucose. Conclusion: A carbohydrate-restricted diet promoted more favorable changes in weight loss, fat loss, and markers of health in obese women who initiated an exercise program compared with a diet higher in carbohydrate. Additionally, obese women who initiated training and dieting with higher HOMA levels experienced greater reductions in blood glucose following an HP diet.

This study specifically looked at obese women who were inactive and who also demonstrated elevated sugar levels in the blood stream (insulin resistance). In this group of women, a low-carbohydrate diet with exercise promoted the best weight loss, fat loss, and reduction in sugar levels than a diet higher in carbohydrates and exercise. This study supports a major issue I have with using carbohydrates before exercise, which ultimately raise your insulin levels and force your body to store more fat and to block any release of fat associated with an exercise routine. Essentially blocking any attempts at losing fat with an exercise program. Restricting carbohydrates an hour before and two hours afterwards will optimize losing body fat.

PMID: 21673483

Comparison of the Atkins, Zone, Ornish, and LEARN diets for change in weight and related risk factors among overweight premenopausal women: the A TO Z Weight Loss Study: a randomized trial.

Journal of the American Medical Association (JAMA)

Gardner, C.D., Kiazand, A., Alhassan, S., Kim, S., Stafford, R.S., Balise, R.R., Kraemer, H.C., King, A.C., "Comparison of the Atkins, Zone, Ornish, and LEARN Diets for Change in Weight and Related Risk Factors Among Overweight Premenopausal Women: the A TO Z Weight Loss Study: a Randomized Trial," Journal of the American Medical Association, Mar 7, 2007, 297(9): pages 969-77.

Popular diets, particularly those low in carbohydrates, have challenged current recommendations advising a low-fat, high-carbohydrate diet for weight loss. Potential benefits and risks have not been tested adequately.

To compare 4 weight-loss diets representing a spectrum of low to high carbohydrate intake for effects on weight loss and related metabolic variables.

Twelve-month randomized trial conducted in the United States from February 2003 to October 2005 among 311 free-living, overweight/obese (body mass index, 27-40) nondiabetic, premenopausal women.

Participants were randomly assigned to follow the Atkins (n = 77), Zone (n = 79), LEARN (n = 79), or Ornish (n = 76) diets and received weekly instruction for 2 months, then an additional 10-month follow-up. MAIN

Weight loss at 12 months was the primary outcome. Secondary outcomes included lipid profile (low-density lipoprotein, high-density lipoprotein, and non-high-density lipoprotein cholesterol, and triglyceride levels), percentage of body fat, waist-hip ratio, fasting insulin and glucose levels, and blood pressure. Outcomes were assessed at months 0, 2, 6, and 12. The Tukey studentized range test was used to adjust for multiple testing. RESULTS: Weight loss was greater for women in the Atkins diet group compared with the other diet groups at 12 months, and mean 12-month weight loss was significantly different between the Atkins and Zone diets ($P < .05$). Mean 12-month weight loss was as follows: Atkins, -4.7 kg (95% confidence interval [CI], -6.3 to -3.1 kg), Zone, -1.6 kg (95% CI, -2.8 to -0.4 kg), LEARN, -2.6 kg (-3.8 to -1.3 kg), and Ornish, -2.2 kg (-3.6 to -0.8 kg). Weight loss was not statistically different among the Zone, LEARN, and Ornish groups. At 12 months, secondary outcomes for the Atkins group were comparable with or more favorable than the other diet groups.

In this study, premenopausal overweight and obese women assigned to follow the Atkins diet, which had the lowest carbohydrate intake, lost more weight and experienced more favorable overall metabolic effects at 12 months than women assigned to follow the Zone, Ornish, or LEARN diets. While questions remain about long-term effects and mechanisms, a low-carbohydrate, high-protein, high-fat diet may be considered a feasible alternative recommendation for weight loss.

TRIAL REGISTRATION: clinicaltrials.gov Identifier: NCT00079573.

PMID: 17341711 [PubMed— indexed for MEDLINE]

Randomized Trial of a Low-Carbohydrate Diet for Obesity
The New England Journal of Medicine

Foster, G.D., Wyatt, H.R., Hill, J.O., et al., “A Randomized Trial of a Low-Carbohydrate Diet for Obesity” *The New England Journal of Medicine*, 348(21), 2003, pages 2082–2090.

Despite the popularity of the low-carbohydrate, high-protein, high-fat (Atkins) diet, no randomized, controlled trials have evaluated its efficacy.

We conducted a one-year, multicenter, controlled trial involving 63 obese men and women who were randomly assigned to a low-carbohydrate, high-protein, high-fat diet or a low-calorie, high-carbohydrate, low-fat (conventional) diet. Professional contact was minimal to replicate the approach used by most dieters.

Subjects on the low-carbohydrate diet had lost more weight than subjects on the conventional diet at 3 months (mean [\pm SD], -6.8 ± 5.0 vs. -2.7 ± 3.7 percent of body weight; $P=0.001$) and 6 months (-7.0 ± 6.5 vs. -3.2 ± 5.6 percent of body weight, $P=0.02$), but the difference at 12 months was not significant (-4.4 ± 6.7 vs. -2.5 ± 6.3 percent of bodyweight, $P=0.26$). After three months, no significant differences were found between the groups in total or low-density lipoprotein cholesterol concentrations. The increase in high-density lipoprotein cholesterol concentrations and the decrease in triglyceride concentrations were greater among subjects on the low-carbohydrate diet than among those on the conventional diet throughout most of the study. Both diets significantly decreased diastolic blood pressure and the insulin response to an oral glucose load.

The low-carbohydrate diet produced a greater weight loss (absolute difference, approximately 4 percent) than did the conventional diet for the first six months, but the differences were not significant at one year. The low-carbohydrate diet was associated with a greater improvement in some risk factors for coronary heart disease. Adherence was poor and attrition was high in both groups. Longer and larger studies are required to determine the long-term safety and efficacy of low-carbohydrate, high-protein, high-fat diets.

This study looked at obese men and women who were randomly placed in either a low-carb diet or a low-fat diet for one year. Men and women on the low-carb diet were instructed to read and follow Dr. Atkins' New Diet Revolution but had little guidance and follow-up. Both groups lost weight and had improvements in blood pressure, HDL cholesterol, and triglycerides after 12 months. The low-carbohydrate diet group demonstrated greater improvements in HDL cholesterol and triglycerides after 12 months compared to the low-fat diet.

This study replicates the normal attempts an individual might perform to try a new diet to lose weight. Because the low-carbohydrate Atkins' diet is very easy to manage and consistently improve weight loss, and improvements in lipid profiles and inflammatory markers, it is the preferred method of weight management and dietary approaches as supported by this article in one of the most reputable journals, The New England Journal of Medicine.

Weight Loss and Cardiovascular Risk Factors in Healthy Women on a Low-carbohydrate Diet or a Low-fat Diet

The Journal of Clinical Endocrinology and Metabolism

Brehm, B.J., Seeley, R.J., Daniels, S.R., et al., "A Randomized Trial Comparing a Very Low-carbohydrate Diet and a Calorie-Restricted Low-fat Diet on Body Weight and Cardiovascular Risk Factors in Healthy Women," The Journal of Clinical Endocrinology and Metabolism, 88(4), 2003, pages 1617–1623.

Untested alternative weight loss diets, such as very low-carbohydrate diets, have unsubstantiated efficacy and the potential to adversely affect cardiovascular risk factors. Therefore, we designed a randomized, controlled trial to determine the effects of a very low-carbohydrate diet on body composition and cardiovascular risk factors. Subjects were randomized to 6 months of either an ad libitum very low-carbohydrate diet or a calorie-restricted diet with 30% of the calories as fat. Anthropometric and metabolic measures were assessed at baseline, 3 months, and 6 months. Fifty-three healthy, obese female volunteers (mean body mass index, 33.6 +/- 0.3 kg/m²) were randomized; 42 (79%) completed the trial. Women on both diets reduced calorie consumption by comparable amounts at 3 and 6 months. The very low-carbohydrate diet group lost more weight (8.5 +/- 1.0 vs. 3.9 +/- 1.0 kg; P < 0.001) and more body fat (4.8 +/- 0.67 vs. 2.0 +/- 0.75 kg; P < 0.01) than the low-fat diet group. Mean levels of blood pressure, lipids, fasting glucose, and insulin were within normal ranges in both groups at baseline. Although all of these parameters improved over the course of the study, there were no differences observed between the two diet groups at 3 or 6 months. Beta-Hydroxybutyrate increased significantly in the very low-carbohydrate group at 3 months (P = 0.001). Based on these data, a very low-carbohydrate diet is more effective than a low-fat diet for short-term weight loss and, over 6 months, is not associated with deleterious effects on important cardiovascular risk factors in healthy women.

This study in obese females demonstrated that using a very low-carbohydrate diet would result in quicker weight loss compared to a low-fat diet, and that despite concerns about the long-term effects of a very low-carbohydrate approach, there were no cardiovascular issues or dangerous side-effects. The very low-carbohydrate diet is absolutely safe!

The Role of Energy Expenditure in the Differential Weight Loss in Obese Women on Low-Fat and Low-Carbohydrate Diets

The Journal of Clinical Endocrinology and Metabolism

Brehm, B.J., Spang, S.E., Lattin, B.L., et al., "The Role of Energy Expenditure in the Differential Weight Loss in Obese Women on Low-Fat and Low-Carbohydrate Diets," Journal of Clinical Endocrinology & Metabolism, 90(3), 2005, pages 1475–1482.10

We have recently reported that obese women randomized to a low-carbohydrate diet lost more than twice as much weight as those following a low-fat diet over 6 months. The difference in weight loss was not explained by differences in energy intake because women on the two diets reported similar daily energy consumption. We hypothesized that chronic ingestion of a low-carbohydrate diet increases energy expenditure relative to a low-fat diet and that this accounts for the differential weight loss. To study this question, 50 healthy, moderately obese (body mass index, $33.2 \pm 0.28 \text{ kg/m}^2$) women were randomized to 4 months of an ad libitum low-carbohydrate diet or an energy-restricted, low-fat diet. Resting energy expenditure (REE) was measured by indirect calorimetry at baseline, 2 months, and 4 months. Physical activity was estimated by pedometers. The thermic effect of food (TEF) in response to low-fat and low-carbohydrate breakfasts was assessed over 5 h in a subset of subjects. Forty women completed the trial. The low-carbohydrate group lost more weight (9.79 ± 0.71 vs. $6.14 \pm 0.91 \text{ kg}$; $P < 0.05$) and more body fat (6.20 ± 0.67 vs. $3.23 \pm 0.67 \text{ kg}$; $P < 0.05$) than the low-fat group. There were no differences in energy intake between the diet groups as reported on 3-d food records at the conclusion of the study (1422 ± 73 vs. $1530 \pm 102 \text{ kcal}$; 5954 ± 306 vs. $6406 \pm 427 \text{ kJ}$). Mean REE in the two groups was comparable at baseline, decreased with weight loss, and did not differ at 2 or 4 months. The low-fat meal caused a greater 5-h increase in TEF than did the low-carbohydrate meal (53 ± 9 vs. $31 \pm 5 \text{ kcal}$; 222 ± 38 vs. $130 \pm 21 \text{ kJ}$; $P = 0.017$). Estimates of physical activity were stable in the dieters during the study and did not differ between groups. These results confirm that short-term weight loss is greater in obese women on a low-carbohydrate diet than in those on a low-fat diet even when reported food intake is similar. The differential weight loss is not explained by differences in REE, TEF, or physical activity and likely reflects underreporting of food consumption by the low-fat dieters.

This study examined moderately obese women and the benefits of a low-carbohydrate diet with more significant weight loss than a low-fat diet. This study really confirms that the old saying “a calorie in, is a calorie out” Meaning that all calories are the same is an absolute fallacy. Calories from carbohydrate intake are more detrimental and their effects to our bodies more deleterious than the same calories from fat and protein. You don’t need to eat less calories to lose weight, but you absolutely need to choose your types of foods very carefully, and avoid the higher carbohydrate type foods.

A Randomized Study Comparing the Effects of a Low-Carbohydrate Diet and a Conventional Diet on Lipoprotein Subfractions and C-Reactive Protein Levels in Patients with Severe Obesity
American Journal of Medicine

Seshadri, P., Iqbal, N., Stern, L., Williams, M., Chicano, K.L., Daily, D.A., McGrory, J., Gracely, E.J., Rader, D.J., Samaha, F.F., “A Randomized Study Comparing the Effects of a Low-Carbohydrate Diet and a Conventional Diet on Lipoprotein Subfractions and C-Reactive Protein

Levels in Patients with Severe Obesity,” *American Journal of Medicine*, 117(5), 2004, pages 398–405.

To compare the effects of a low-carbohydrate diet and a conventional (fat- and calorie-restricted) diet on lipoprotein subfractions and inflammation in severely obese subjects.

We compared changes in lipoprotein subfractions and C-reactive protein levels in 78 severely obese subjects, including 86% with either diabetes or metabolic syndrome, who were randomly assigned to either a low-carbohydrate or conventional diet for 6 months.

Subjects on a low-carbohydrate diet experienced a greater decrease in large very low-density lipoprotein (VLDL) levels (difference = -0.26 mg/dL, $P = 0.03$) but more frequently developed detectable chylomicrons (44% vs. 22%, $P = 0.04$). Both diet groups experienced similar decreases in the number of low-density lipoprotein (LDL) particles (difference = -30 nmol/L, $P = 0.74$) and increases in large high-density lipoprotein (HDL) concentrations (difference = 0.70 mg/dL, $P = 0.63$). Overall, C-reactive protein levels decreased modestly in both diet groups. However, patients with a high-risk baseline level (>3 mg/dL, $n = 48$) experienced a greater decrease in C-reactive protein levels on a low-carbohydrate diet (adjusted difference = -2.0 mg/dL, $P = 0.005$), independent of weight loss.

In this 6-month study involving severely obese subjects, we found an overall favorable effect of a low-carbohydrate diet on lipoprotein subfractions, and on inflammation in high-risk subjects. Both diets had similar effects on LDL and HDL subfractions.

This study proved that consuming a low-carbohydrate diet will reduce the inflammatory markers in high risk obese patients. The low-carbohydrate diet reduced the VLDL levels much more than the low-fat diet. The VLDL fractions or very low-density lipoproteins are the nastiest of the bunch and only lipoprotein a will cause more coronary artery disease than the VLDL fractions. This fraction is made up of the very inflammatory triglycerides, attached to the very inflammatory dangerous small particle of the LDL's. (Note the large particle LDL's which really cause no significant inflammation in the blood vessels, are the only part of the LDL particles that the statin cholesterol lowering drugs affect.) So reducing the VLDL's is incredibly important in reduce the leading cause of heart disease, which is inflammation.

The Effects of Low-Carbohydrate Versus Conventional Weight Loss Diets in Severely Obese Adults: One-Year Follow-up of a Randomized Trial

Stern, L., Iqbal, N., Seshadri, P., et al., “The Effects of Low-Carbohydrate Versus Conventional Weight Loss Diets in Severely Obese Adults: One-Year Follow-up of a Randomized Trial,” *Annals of Internal Medicine*, 140(10), 2004, pages 778–785.

A previous paper reported the 6-month comparison of weight loss and metabolic changes in obese adults randomly assigned to either a low-carbohydrate diet or a conventional weight loss

diet.

To review the 1-year outcomes between these diets. DESIGN: Randomized trial.

Philadelphia Veterans Affairs Medical Center.

132 obese adults with a body mass index of 35 kg/m² or greater; 83% had diabetes or the metabolic syndrome.

Participants received counseling to either restrict carbohydrate intake to <30 g per day (low-carbohydrate diet) or to restrict caloric intake by 500 calories per day with <30% of calories from fat (conventional diet).

Changes in weight, lipid levels, glycemic control, and insulin sensitivity. RESULTS: By 1 year, mean (+/- SD) weight change for persons on the low-carbohydrate diet was -5.1 +/- 8.7 kg compared with -3.1 +/- 8.4 kg for persons on the conventional diet. Differences between groups were not significant (-1.9 kg [95% CI, -4.9 to 1.0 kg]; P = 0.20). For persons on the low-carbohydrate diet, triglyceride levels decreased more (P = 0.044) and high-density lipoprotein cholesterol levels decreased less (P = 0.025). As seen in the small group of persons with diabetes (n = 54) and after adjustment for covariates, hemoglobin A(1c) levels improved more for persons on the low-carbohydrate diet. These more favorable metabolic responses to a low-carbohydrate diet remained significant after adjustment for weight loss differences. Changes in other lipids or insulin sensitivity did not differ between groups. Limitations: These findings are limited by a high dropout rate (34%) and by suboptimal dietary adherence of the enrolled persons.

Participants on a low-carbohydrate diet had more favorable overall outcomes at 1 year than did those on a conventional diet. Weight loss was similar between groups, but effects on atherogenic dyslipidemia and glycemic control were still more favorable with a low-carbohydrate diet after adjustment for differences in weight loss.

This study examined the benefits of a low-carbohydrate diet when compared to a conventional weight loss regimen in obese patients with diabetes or the metabolic syndrome. This one year study demonstrated improvements in weight loss, significant reductions in glucose control, and markers of inflammation associated with cardiovascular disease than the conventional weight loss approach.

Pilot 12-Week Weight-Loss Comparison: Low-Fat versus Low-Carbohydrate (Ketogenic) Diets
Obesity Research

Greene, P., Willett, W., Devecis, J., et al., "Pilot 12-Week Feeding Weight-Loss Comparison: Low-Fat vs Low-Carbohydrate (Ketogenic) Diets," Abstract Presented at The North American Association for the Study of Obesity Annual Meeting 2003, Obesity Research, 11S, 2003, page 95OR.

Greene, P.J., Devecis, J., Willett, W.C., "Effects of Low-Fat Vs Ultra-Low-Carbohydrate Weight-Loss Diets: A 12-Week Pilot Feeding Study," abstract presented at Nutrition Week 2004, February 9–12, 2004, in Las Vegas, Nevada.

Some researchers claim that people only lose weight on very low-carb diets due to a reduction in calorie intake. Others have argued that very low-carb diets offer a "metabolic advantage" allowing people to lose weight without restricting calories. The objective of this study was to evaluate if people who follow very low-carb diets lose weight only due to restricting calories.

Twenty-one participants were recruited and were randomly assigned to three separate diets for 12 weeks: a low-fat diet (55% carb, 15% protein, and 30% fat) and two different very low-carb diets (both had 5% carb, 30% protein, and 65% fat). The low-fat (LF) diet and one of the very low-carb (LC1) diets provided a total of 1500 calories a day for women and 1800 calories a day for men. The second very low-carb diet group was allowed 300 additional calories a day (1800 calories for women and 2100 calories for men). Meals were provided during the study.

After 12 weeks, all participants lost weight. Both the very low-carb groups lost more weight than the low-fat group (LC1: -23 lbs, LC2: -20 lbs, and LF: -17 lbs). The difference between the diets was not statistically significant. More body fat was lost than lean body mass (such as muscle) or water on all the diets. All participants lost inches from their waist and hips.

All three diets were effective in reducing weight in adults and the weight lost was primarily body fat. Even participants consuming higher calories on the very low-carb diet were able to lose more weight compared to the lower calorie, low-fat diet. Several risk factors for heart disease improved on all diets. The authors concluded that very low-carb diets do not reduce weight only by restricting calories.

This study compared the benefits of weight loss with the very low-carbohydrate diet versus the low-fat diet. Individuals who consumed more calories on the very low-carb diet were able to lose more weight compared to the lower calorie, low-fat diet. Again, "calories in do not equal calories out." And again the low-carbohydrate diet clearly was more beneficial in weight loss

than the low-fat diet. So why are we still hearing that the low-carb diet is bad for you and the low-fat is great. Because an integral part of the low-fat diet is increased grains, and increased corn consumption which I believe is one of the most important causes of our obesity epidemic. Those lobbyist groups are exceedingly powerful and we have been deceived for so long about how great the low-fat diet is, and how dangerous the low-carbohydrate diet is. Its time to change! Just say no to the breads and high carbohydrate foods, and yes to high protein, with fats type foods and the low glycemic index vegetables, which should constitute 75% of your daily carbohydrate intake.

Effect of 6-Month Adherence to a Very Low-carbohydrate Diet Program

Westman, E.C., Yancy, W.S., Edman, J.S., et al., "Effect of 6-Month Adherence to a Very Low-carbohydrate Diet Program," *American Journal of Medicine*, 113(1), 2002, pages 30–36.

To determine the effect of a 6-month very low-carbohydrate diet program on body weight and other metabolic parameters. Fifty-one overweight or obese healthy volunteers who wanted to lose weight were placed on a very low-carbohydrate diet (<25 g/d), with no limit on caloric intake. They also received nutritional supplementation and recommendations about exercise, and attended group meetings at a research clinic. The outcomes were body weight, body mass index, percentage of body fat (estimated by skinfold thickness), serum chemistry and lipid values, 24-hour urine measurements, and subjective adverse effects. Forty-one (80%) of the 51 subjects attended visits through 6 months. In these subjects, the mean (+/- SD) body weight decreased 10.3% +/- 5.9% (P <0.001) from baseline to 6 months (body weight reduction of 9.0 +/- 5.3 kg and body mass index reduction of 3.2 +/- 1.9 kg/m²). The mean percentage of body weight that was fat decreased 2.9% +/- 3.2% from baseline to 6 months (P <0.001). The mean serum bicarbonate level decreased 2 +/- 2.4 mmol/L (P <0.001) and blood urea nitrogen level increased 2 +/- 4 mg/dL (P <0.001). Serum total cholesterol level decreased 11 +/- 26 mg/dL (P = 0.006), low-density lipoprotein cholesterol level decreased 10 +/- 25 mg/dL (P = 0.01), triglyceride level decreased 56 +/- 45 mg/dL (P <0.001), high-density lipoprotein (HDL) cholesterol level increased 10 +/- 8 mg/dL (P <0.001), and the cholesterol/HDL cholesterol ratio decreased 0.9 +/- 0.6 units (P <0.001). There were no serious adverse effects, but the possibility of adverse effects in the 10 subjects who did not adhere to the program cannot be eliminated. A very low-carbohydrate diet program led to sustained weight loss during a 6-month period. Further controlled research is warranted.

Finally the last one reviewed and the results are identical. The very low-carbohydrate diet of less than 25 grams a day for 6 months was not only safe, but the overweight or obese participants experienced significant weight loss and had a reduction in the markers of inflammation compared to baseline.

