

IDEAL WEIGHT: ACHIEVE IT NATURALLY

By John Clark M.D. NorthernLightsHealthEducation.com

THE SET UP

Baby Brenda did not intend to be a bother. Her mother had thought she wanted children, but her career was also very important to her. Her time with Brenda was sweet but short. Then, exhausted after a long day, she sought peace and quiet alone. Though Brenda cried from time to time, a bottle always seemed sufficient to quell the tears. Now when Brenda feels troubled, food always seems sufficient to ease the pain. It is almost as though mother is nearby.

Obesity is up in food-quieted infants. Babies are often fed to keep them quiet when their real need may not be hunger. This can become a lifelong habit, often tied to emotional eating.¹

Overweight girls are at increased risk of premature puberty. Since 1963 the number of 6- to 19-year-olds carrying excess weight has risen by 275%.² Eighty percent of obese 10- to 14-year-olds, from obese families, end up as obese adults.³ Consequently, childhood diabetes,⁴ osteoarthritis⁵ and premature puberty⁶ are at an all-time high.

Obesity runs in families. Even the family dog is fat.⁷ They say, the apple never falls far from the tree - you may be genetically "wired" for obesity. However, it is your choices that determine your weight.⁸ It has been said that genetics loads the gun—lifestyle pulls the trigger.⁹

STATISTICS: WHO HAS THE EDGE IN LATEST POLLS?

Every day, in the United States, 67% of adults are overweight or obese, and 19% of adults smoke. Every day, in the United States, smoking is the #1 cause of preventable deaths while obesity is #2 and gaining.¹⁰ The most prominent contributors to mortality in the United States in 1990 were tobacco (an estimated 400,000 deaths), diet and activity patterns (300,000), alcohol (100,000), microbial agents (90,000), toxic agents (60,000), firearms (35,000), sexual behavior (30,000), motor vehicles (25,000), and illicit use of drugs (20,000).¹¹

Obesity is now at an all-time high. In the US, 67% men and 57% women are overweight or obese. Why? Because of a sedentary lifestyle, poor food choices, obsession with dieting, lack of time, etc.¹²

Poverty drains nutrition from family diet. Low-energy-dense food cost increased 20% in two years (2004-2006). High-energy-dense food prices actually dropped 2%.¹³ It is relatively inexpensive to get obese.

Looking at yearly maps of the United States from the CDC (Centers for Disease Control) with states color-coded for the levels of obesity, it becomes very clear that we have an epidemic of obesity in full swing. For example, Mississippi, in 1990, reported that 10%-14% of its population were obese; by 1995 that number had risen to 15%-19%; and by 2005, over 30%.

Dieting is up, but weight loss is down. At any one time, more than two-thirds of US adults are

BMI Chart

Weight lbs →	100	105	110	115	120	125	130	135	140	145	150	155	160	165	170	175	180	185	190	195	200	205	210	215
Weight kgs →	45.5	47.7	50.0	52.3	54.5	56.9	59.1	61.4	63.6	65.9	68.2	70.5	72.7	75.0	77.3	79.5	81.8	84.1	86.4	88.6	90.9	93.2	95.5	97.7
Height in/cm ↓	Healthy				Overweight				Obese				Extremely Obese											
5'0" - 152.4	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42
5'1" - 154.9	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	
5'2" - 157.4	18	19	20	21	22	22	23	24	25	26	27	28	29	30	31	32	33	33	34	35	36	37	38	39
5'3" - 160.0	17	18	19	20	21	22	22	23	24	25	26	27	28	29	30	31	32	32	33	34	35	36	37	38
5'4" - 162.5	17	18	18	19	20	21	22	23	24	24	25	26	27	28	29	30	30	31	32	33	34	35	36	37
5'5" - 165.1	16	17	18	19	20	20	21	22	23	24	25	25	26	27	28	29	30	30	31	32	33	34	35	35
5'6" - 167.0	16	17	17	18	19	20	21	21	22	23	24	25	25	26	27	28	29	29	30	31	32	33	34	34
5'7" - 170.1	15	16	17	18	18	19	20	21	22	22	23	24	25	25	26	27	28	29	29	30	31	32	33	33
5'8" - 172.7	15	16	16	17	18	19	19	20	21	22	22	23	24	25	25	26	27	28	28	29	30	31	32	32
5'9" - 175.2	14	15	16	17	17	18	19	20	20	21	22	22	23	24	25	25	26	27	28	28	29	30	31	31
5'10" - 177.8	14	15	15	16	17	18	18	19	20	20	21	22	23	23	24	25	25	26	27	28	28	29	30	30
5'11" - 180.3	14	14	15	16	16	17	18	18	19	20	21	21	22	23	23	24	25	25	26	27	28	28	29	30
6'0" - 182.8	13	14	14	15	16	17	17	18	19	19	20	21	21	22	23	23	24	25	25	26	27	27	28	29
6'1" - 185.4	13	13	14	15	15	16	17	17	18	19	19	20	21	21	22	23	23	24	25	25	26	27	27	28
6'2" - 187.9	12	13	14	14	15	16	16	17	18	18	19	19	20	21	21	22	23	23	24	25	25	26	27	27
6'3" - 190.5	12	13	13	14	15	15	16	16	17	18	18	19	20	20	21	21	22	23	23	24	25	25	26	26
6'4" - 193.0	12	12	13	14	14	15	15	16	17	17	18	18	19	20	20	21	22	22	23	23	24	25	25	26
Underweight																								

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trying to lose weight or are avoiding weight gain.¹⁴ Most of them regain the weight within five years.¹⁵

Obesity costs have soared to \$150 billion. Obesity-related health care costs in 2000 were \$117 billion.¹⁶ The U.S. diet industry grosses \$33 billion per year in diet books, diet foods, diet programs and weight-loss gimmicks.¹⁷

Have we, in our obesity trends, become a sign of the end of the world? What does the Bible say? "But as the days of Noe were, so shall also the coming of the Son of man be. For as in the days that were before the flood they were eating and drinking, marrying and giving in marriage, until the day that Noe entered into the ark, And knew not until the flood came, and took them all away; so shall also the coming of the Son of man be."¹⁸

OBESITY: WHAT IS IT?

Obesity is based on Body Mass Index (BMI). The formula for BMI is weight (kg)/(height in cm)² or 703 x pounds/inches². A BMI of 18.5 or less is considered underweight; 18.5 < BMI < 25 ideal weight; 25 < BMI < 30 overweight; 30 > BMI < 35, obese (mild); 35 < BMI < 40, obese (moderate); and 40 < BMI obese (severe). There are charts available that make determining your BMI easier. Another useful way to access obesity is waist circumference. For men, a waist circumference of greater than 40 inches and for women, a waist circumference of greater than 35 inches indicates obesity.¹⁹ A large waist circumference is more dangerous than a high BMI for many of the diseases we will discuss.

IS IT REALLY WORTH IT?

Why lose weight? You may be wondering, "If everyone is gaining, why fight the current?" There are a number of good reasons to choose weight loss: A clearer mind, a healthier body image, the avoidance of pain and depression, to reduce financial burden (health costs), to be around for your children and grandchildren, and to avoid disability and needing to be cared for by others, just to name a few. Life expectancy for the morbidly obese is reduced by 8 years in women and 20 years for men.²⁰ Shedding a few pounds can diminish the threat.

Men participating in successful weight loss programs can reduce their risk of dying by 41%.²¹ By dropping 20 to 29 pounds, diabetics

can reduce their risk of dying by 33%.²² It would be well to make weight loss a way of life.

Continuous weight loss, approaching ideal body weight, can reduce the risk of diabetes by 30-50%.²³ If your health is failing, weight loss just may be the key to recovery. A five percent weight loss in obese individuals can result in improved blood sugar control, blood pressure, cholesterol, and triglycerides.²⁴

THE BAD NEWS

Those tenacious extra pounds can be a little-recognized source of disease. Eleven percent of cancer, 14% of osteoarthritis, 17% of heart disease and hypertension, 30% of gallbladder disease and 57% of diabetes can be attributed to obesity.²⁵

To put it another way, the hidden cost of abundant fat can be calculated in the increased risk of other diseases. The risk of diabetes increases by 244%-600%,²⁶ gallstones by 400%-500%,²⁷ depression by 400%,²⁸ sleep apnea risk increases by 77%.²⁹ Asthma risk goes up 190%,³⁰ reflux up 94%,³¹ deep vein thrombosis (blood clots) up 140%,³² coronary heart disease up 81%,³³ gout up 200%,³⁴ female infertility up 200%,³⁵ male infertility due to low sperm count up 300%,³⁶ premenstrual syndrome (PMS) risk goes up 180%.³⁷

Being very obese can INCREASE THE RISK OF DYING BY 140%³⁸, RISK OF STROKE BY 70%.³⁹ Stool and urine incontinence risk increases 45% and 150% respectively;⁴⁰ and risk of cirrhosis from fatty liver due to obesity goes up 120%.⁴¹

Increasing body weight is a strong risk factor for diabetes. Eighty percent of patients with Type 2 Diabetes are overweight or obese.⁴² To further examine the diabetes risk, it is important to realize that for each 5 pounds of weight gained, the risk of diabetes goes up 10%.⁴³ The risk of getting diabetes sometime during a person's life is 7% for underweight people, 15% for normal weight people, 26% for overweight people, 44% for obese people, and 57% for the very obese.⁴⁴

Increasing body weight is a strong risk factor for diabetes. Eighty percent of patients with Type 2 Diabetes are overweight or obese.

The fat most implicated in diabetes and its complications is what is called central, visceral

or organ fat.⁴⁵ This is fat that is inside the body surrounding the abdominal organs. This fat is always kept at the higher body core temperature. This fat is the source of oxidized free radicals of fat and cholesterol.⁴⁶ Diabetics tend to have more of this type of fat.⁴⁷ Visceral obesity also leads to elevated triglycerides and reduced HDL levels, substantially increasing the risk of coronary heart disease.⁴⁸

The link between higher body fat and cancer risk is also related to the fat cells' involvement in hormone production. It is uncommon to have breast cancer in the absence of estrogen. Excess estrogen production in obese women gives them a poorer prognosis with breast cancer.⁴⁹ Obesity increases the risk of other cancers too: ovarian cancer 14%, non-Hodgkin's lymphoma 17%, pancreatic cancer 24%, multiple myeloma 31%, breast cancer in postmenopausal women 40%, leukemia 50%, kidney cancer 53%, colorectal cancer 61%, adenocarcinoma of the esophagus 138%, and endometrial cancer 189%.⁵⁰

Blood pressure also increases with rising obesity. A 13 lb weight gain increases the risk of hypertension by 36%, 24 lbs by 64%, 35 lbs by 132%, 46 lbs by 191%, and 55 lbs or more by 265%. On the other hand, weight loss can decrease the risk. A 14 lb weight loss can reduce the risk by 24% and weight loss of 22 lbs or more can reduce the risk by 53%.⁵¹

Weight gain increases the risk of back pain and arthritis. Back pain increases significantly with weight gain.⁵² Pressure from excess weight flattens the inter-vertebral discs causing them to deteriorate and resist rejuvenation.⁵³ An excessive waist with its increased visceral fat may swell the risk of arthritis more than absolute BMI.⁵⁴ Normal weight people have a risk of arthritis of only 17%; for the very obese the risk climbs to 44%.⁵⁵

Extra-large clothes accompany extra-large skin problems.⁵⁶ If you find yourself buying those extra-large clothes sizes you can be sure you also have a lot more skin than you were born with. Skin diseases increase in the obese from altered skin blood flow and physiology.⁵⁷

Remember Alzheimer's disease? Diabetes and obesity quadruple the risk of developing Alzheimer's.⁵⁸

Aggressive weight loss may ease hypothyroidism. About 10% of obese subjects are hypothyroid. Weight gain has been associated with hypothyroidism while weight loss has normalized it.⁵⁹

Depression stalks the obese. Depression doubles the risk of obesity. Depressed, obese people eat about 20% more calories than their non-obese counterparts.⁶⁰ And it works both ways. Obesity quadruples the risk of depression.⁶¹

Social isolation increases with obesity. Obesity in women is associated with lower individual earnings, few friends outside the family circle, and long-term unemployment.⁶²

Illness related work absenteeism increases in the obese. Obese employees are 80% more likely to experience work absences and are absent 3.7 more days per year than non-obese people.⁶³

The obese population may be living longer with better-controlled risk factors but are, paradoxically experiencing more disability. Obesity increases the risk of serious disability by 175%. Obese individuals have twice the risk of being unable to perform the activities of daily living.⁶⁴

CONQUERING OBESITY NATURALLY

You choose! You are a reflection of your choices. Your life and health habits are yours alone to make. Be the best you can be. The choice is yours.

Health: healthy weight, not lowest weight. The ultimate goal is health and healthy weight for your entire lifetime. With the right focus you will have increased energy, better self-esteem, more personal control, and a positive attitude. Eat for the long haul; choose a life-long plan.

Are you ready to change? Internal motivation is better than external. What you choose to do for yourself is more lasting and satisfying than what someone else pressures you to do.

Only an unwise person has to learn everything by his or her own experience. Be realistic—make small changes over time. Be adventurous—expand your tastes, try new dishes. Be flexible—balance your food and activity over several days. Be sensible—enjoy food in moderation. Be active – walk the dog, ride a bike, push a stroller.

EXERCISE CAN BE GREAT FUN

Physical activity predicts success. Choose something you enjoy, preferably outdoors in the open air and sunshine. Get at least sixty minutes, combined total, most days, and you will enjoy the benefits: healthy weight, healthy

heart, strong bones, great sleep, stress relief, increased energy, and a positive and confident outlook!

Why exercise? Weight will reduce with diet alone, but muscle mass and bone density will disappear too. Exercise maintains muscle mass⁶⁵ and bone density⁶⁶ while fat is lost. It also increases aerobic capacity for better cardiovascular fitness.⁶⁷

As already mentioned, sedentary lifestyle accelerates risk of obesity. In fact, an 8-hour sedentary job increases the risk of obesity by 20%, and of diabetes by 28%.⁶⁸

Get your beauty rest. Children sleeping less than 9 hours are at increased risk of obesity.⁶⁹ Having a regular bedtime before 10:00pm reduces your risk of obesity by 38%.⁷⁰

You can tip the balance in the battle of the bulge. Obesity results from an imbalance between energy intake and energy expenditure. Environmental factors, such as the increased availability of high caloric food or the decreased need for physical activity, contribute to its development.⁷¹ A delicate balance exists within the human body. Weight depends upon the balance of energy input from diet, against energy expenditure through exercise. The balance is also affected by basal metabolic rate. When the total energy input exceeds expenditure, weight gain occurs. Many people eat as though they were going to be doing hard physical labor when, in fact, they are not. This creates an environment for obesity. You will find success when your eating matches your energy and weight loss needs.⁷²

Weight gain is often the result of biological and cultural mismatches to the modern environment where there are strong signals to eat, weak signals to stop eating, increased availability of high calorie dense food, eating is rewarded, there are no viable alternatives at times, and overeating is considered of high status.

On the other hand, activity is associated with weak signals to continue and strong signals to stop, reduced availability, inactivity is applauded, or made a viable alternative, and given a high social status. This plays into the concept of eating to live, versus living to eat. Many people eat as though they were preparing for a long day of heavy physical labor when in reality their lives are pretty sedentary. If we eat to live, we match our energy intake to our expected energy expenditure, and this helps keep our weight stable. If we live to eat, our

energy intake exceeds our energy needs and obesity ensues. The wise man commented on this principle in this way, "Blessed art thou, O land, when thy king is the son of nobles, and thy princes eat in due season, for strength, and not for drunkenness!"⁷³

Do something you like and enjoy. Exercises shown to be beneficial include walking, running, aerobics (both in water and in the gym),⁷⁴ and intermittent exercise – especially on accessible home equipment.⁷⁵

How much do I need to exercise? You may have limitations that will need to be overcome, but we suggest at least sixty minutes daily. The best times are before breakfast,⁷⁶ and after meals. Exercising after meals results in greater energy expenditure,⁷⁷ while decreasing blood sugar and insulin levels in diabetics.⁷⁸ Moderate exercise is as beneficial as intense, and short bouts are as effective as long (meaning you don't have to do all sixty minutes at one time).⁷⁹

Walking is a little-appreciated health booster. Each hour of brisk walking per day reduces the risk of obesity by 24% and diabetes by 34%.⁸⁰

A ten year exercise study was conducted which revealed that an active lifestyle prevents weight gain and a sedentary lifestyle with little recreational activity increases the risk of weight gain by 200% for men and 300% for women.⁸¹

KNEE PAIN CRIPPLES WEIGHT LOSS: NOT SO ACCORDING TO NEW STUDIES

"But I can't exercise; I have a knee with arthritis, and it hurts to walk", you may be saying, like so many others.

Joint pain may be a sign you are rusting out, not wearing out. Exercise has been shown to be beneficial, reducing pain and obesity.

In a study of people with knee arthritis, six months of weight loss and exercise actually improved knee pain, disability,⁸² walking gait and the performance of a six-minute walk distance test, and a timed stair-climbing test.⁸³ Samples of knee fluid showed decreased inflammatory markers.⁸⁴ You "rust" out before you wear out. Most arthritis pain will improve with exercise. Weight loss helps too; a 10%

weight reduction improves knee function by 28% in patients with osteoarthritis.⁸⁵

THE WEIGHT OF THE BENEFITS

Exercise yields great dividends in weight loss. Exercise increases muscle strength and bulk, bone mineral density, insulin sensitivity,⁸⁶ the immune system,⁸⁷ self-control around food,^{88,89} HDL “good” cholesterol,⁹⁰ and maintains weight loss over the long term.⁹¹ Exercise decreases visceral or central fat^{92,93} and waist-hip ratio,⁹⁴ the body’s physiological response to stress,⁹⁵ high blood pressure,⁹⁶ cholesterol and triglycerides,⁹⁷ cardiac risk factors,⁹⁸ oxidative stress,⁹⁹ and the risk of gallstones.¹⁰⁰ Of particular importance is the way aerobic fitness curbs cardiac deaths. Being cardio-vascularly fit can reduce the risk of mortality from obesity by 75%.¹⁰¹

Need slow motion? Eat a western diet. The western diet slows people down physically and makes them sedentary, reducing energy expenditure and increasing weight gain.¹⁰²

BRING OUT THE FORK: WE’RE GOING TO TALK DIET NOW!

Top diets boast whole plant foods.¹⁰³ People adopting a whole plant food diet can lose almost three times as much weight in a year as those choosing other diet methods. And people choosing a whole plant food diet as a means of weight loss are four times more likely to stick with their chosen diet.¹⁰⁴

By the way, a word of caution: When you go on a whole plant food diet, and your health problems start to resolve, you may need to have your medications adjusted. This is especially true for diabetic medications and blood pressure medications.

AVOID WEARISOME DIETS

It’s not just a diet; it’s a lifestyle change! Be aware of fad diets. Steer clear of these claims; fast, easy weight loss; breakthrough miracle, banish fat, secret formula, new discovery, cure, balances hormones, enzymatic processes. Is the author credible? Be cautious about diets that advocate magic or miracle foods, rapid weight loss or quick fixes, no exercise, rigid menus, specific food combinations, recommendations based on a single study or studies published

without a peer review, and promises that sound too good to be true.

New research shows that using artificially sweetened foods and drinks to manage weight could backfire. Artificial sweeteners confuse the mind’s ability to judge calorie content, making people who use diet drinks or diet foods crave more calories.¹⁰⁵ People who use diet drinks have been shown to eat more calories, especially carbohydrates.¹⁰⁶

Some fad diets are especially worrisome. Colorectal cancer risk increased fourfold with consumption of high-fat, high-protein, and low-carbohydrate diets.¹⁰⁷ By contrast, low-fat, high-carbohydrate diets of whole plant foods increase intake of; fiber, bio-available calcium, vitamins, minerals, cancer preventing antioxidants and phytochemicals which lower risk for heart disease, cancer, osteoporosis, diabetes, and high blood pressure.

WHOLE PLANT FOODS

You can eat all you want and still lose weight – if you choose only whole plant foods. In one study eating unlimited amounts of fruits and vegetables led to a fourteen-pound weight loss over six months and seventeen pounds over twenty-five months.¹⁰⁸

Whole wheat has eight times the chromium of white flour. So, guess what, it will take eight times as much of a white flour dish to satisfy your bodies nutrient hunger as a whole grain dish.¹⁰⁹ It is any wonder we have overweight people, totally stuffed with caloric rich foods and still feeling hungry?

Fruits and vegetables are the mainstay of successful weight loss. In one 2-year study, individuals on a vegan diet lost 3 ½ times more weight than those on just a low-fat diet.¹¹⁰ Eating more fruit, vegetables, and whole grains improves weight loss and maintenance of weight loss, cholesterol and triglycerides, and blood pressure.¹¹¹

Low-energy-dense foods aid weight loss. Weight loss is three times greater for people who eat low-energy-dense foods than for those who just choose “low-fat” foods.¹¹² Caloric, or energy-density, is the key to satisfying cravings and weight loss. Caloric density is a measure of the number of calories per gram in a serving of food. Studies show that normal-weight persons eat lower-energy-dense foods than obese persons. Persons on a diet high in fruit and

vegetables have the lowest energy-density values and the lowest amount of obesity.¹¹³

Energy-density is key to understanding why eating fruits and vegetables can help in a weight management program. Energy-density is the number of calories a food has for its weight. Foods with high calories for their weight, such as oils and fats, are high-energy-dense foods. They usually have between 4 to 9 calories per gram. These include snack foods, cheeses, butters, meats, and gravies. Medium-energy-dense foods have fewer calories per gram of weight, usually between 1.5 to 4 calories per gram. These foods include bagels, whole grain breads, hummus, dried fruits, and vegetarian ravioli. Low-energy-dense foods typically range in calorie content from 0 to 1.5 calories per gram and include fresh fruits and vegetables, beans, and whole grains. In one study, people given a low-calorie-dense, unrefined diet ate 50% fewer calories. What's more, they took 33% longer to eat their food, increasing satiety (satisfaction).¹¹⁴

Make a trade agreement that will boost your health index. Reduce the number of daily calories consumed by substituting low-energy-dense fruits, vegetables, whole grains, and legumes for high-energy-density foods.¹¹⁵

Eat your fruits and vegetables. Fat content increases the energy-density of foods.

Water and fiber in foods increase volume and reduce energy-density. In their natural state, fruits and vegetables have high water and fiber content and are low in fat and energy-density.¹¹⁶

Feel satisfied on fewer calories. People tend to eat the same volume regardless of the calorie content.^{117,118} It is volume more than calories that makes people feel full.¹¹⁹ Eating low-energy-dense, high-nutrient dense fruits and vegetables brings satisfaction without the calories.

Energy substitutes can slash weight gain. To lower the energy-density of foods, such as soups, sandwiches, and casseroles, substitute fruits and vegetables for some of the ingredients that have higher energy-density, such as high-fat meats, cheeses, and pasta.¹²⁰

One high-energy-dense calorie source is juice. Juice drinkers consumed calories eleven times faster than whole fruit eaters. Whole fruit contains fiber while juice has none. Sauce eaters consumed calories three times faster than whole fruit eaters.¹²¹ The appetite is satisfied better with whole fruit.¹²²

Canned food is a poor substitute. Frozen or canned fruits and vegetables are good options when fresh produce is unavailable. Choose items without added sugar, syrup, cream sauces, or salt. Salt can make you eat more and go for calorie-laden drinks.¹²³

Vegetables dominate the low-calorie class. Vegetables tend to be lower in calories than fruit. Substituting more vegetables than fruit for foods of higher-energy-density can be helpful in a weight management plan.

Don't get blitzed by hidden calories. Some desserts that include fruit may also have high calorie, fat, and sugar content. Breading and frying vegetables or adding high-fat dressings and sauces greatly increase the calorie and fat content of the dish.¹²⁴ You can have variations on the dessert theme. Desserts tend to be very energy-dense.¹²⁵ The stomach actually increases in volume when sweet, sugar laden foods are eaten at the end of a meal.¹²⁶ Fresh fruit makes a good, weight sensitive, dessert substitute. In one study, overweight people were more likely to order dessert if the waitress provided an appetizing description and encouraged them to order it.¹²⁷

You may be wondering, "Should I avoid nuts?" given their high calorie content. And while I would urge moderation, in one study participants who ate nuts two or more times per week had a 30% lower risk of weight gain. Nuts have been found to be cardio-protective¹²⁸ and to reduce diabetes risk.¹²⁹

FIBER: A DIETER'S FRIEND

Fiber contains no calories; is not a nutrient, but is vital for good health. A 14-gram increase in daily fiber intake reduces calorie consumption by 10% and promotes weight loss.¹³⁰ Increased fiber consumption from whole grains cuts the risk of weight gain in half. Refined grain products have the opposite effect.¹³¹ Other benefits of fiber are enhanced blood sugar control, decreased insulin levels,¹³² lower cholesterol,¹³³ reduced calorie assimilation by the body,¹³⁴ and reduced hunger.¹³⁵

Toast cuts blood sugar levels. Toasting bread lowers blood glucose response by 25%, which is a good thing.¹³⁶

CHEW ON THIS

Appetite is reduced by nerve feedback to the brain stimulated by chewing.¹³⁷ The more you chew, the less food it takes to satisfy you.¹³⁸ Choosing foods that require more chewing can help reduce calorie intake.

FOOD ADDITIVES: BETTER LIVING THROUGH CHEMISTRY?

Mono sodium glutamate (MSG) intake doubles the risk of obesity.^{139,140} MSG is used in laboratory animals to induce obesity and diabetes.¹⁴¹ Fructose is another culprit.¹⁴² Fructose ingestion increases obesity—especially abdominal obesity.¹⁴³ It also increases triglycerides and cholesterol,¹⁴⁴ oxidative stress,¹⁴⁵ diabetes and diabetic complications such as retinopathy.¹⁴⁶

LIQUIDS AND LIQUID MEALS

Ditch the soda if you're trying to lose weight. Sodas decreased the feeling of being satisfied and increased subsequent overeating.¹⁴⁷ One additional soda per day raises the risk of obesity by 60%.¹⁴⁸ The calories of two sodas consumed every day can add 30 lbs in a year.

Dehydration and salt overload are associated with increased obesity.¹⁴⁹ Thirsty people tend to drink soda and eat when what they really need is water.¹⁵⁰ Dehydration increases cancer, diabetes, cardiovascular disease, and hypertension.¹⁵¹

Water is still the best beverage. Historically water is the only liquid man consumed after being weaned. Modern man consumes a variety of liquids that require digestion. The body does not handle liquids that require digestion as well as solid food.¹⁵² Our recommendation is that - only water be consumed between meals. Digestion is better if a meal has not been diluted with any liquid. Water, taken thirty minutes before mealtime has been shown to significantly reduce calorie intake.¹⁵³

Snacking between meals dramatically increases the number of daily calories consumed. Obese individuals consume significantly more sweet, fatty snacks.

SNACKING: IS IT A CULPRIT IN YOUR DIET?

Snacking between meals dramatically increases the number of daily calories consumed. Obese individuals consume significantly more sweet, fatty snacks.¹⁵⁴ Snacking women have a 38% higher risk of obesity and snacking men have an 88% higher risk of obesity.¹⁵⁵

TRIGGER FOODS THAT CAN IGNITE A RAGING APPETITE

The taste of fat increases the amounts of food people eat.¹⁵⁶ Sugar and fat work by weakening food satisfaction signals to the brain and activating hunger signals.^{157 158} Dietary fat intake affects obesity.¹⁵⁹ Obesity rates of countries can be predicted by how much fat their population eats. In one study, cutting fat intake by 10% (from 37% down to 27%) led to a quarter pound loss per week.¹⁶⁰ One source of high fat, low fiber food is fast food. Watching television three hours a week and eating fast food twice a week increases the risk of obesity and diabetes by 160%.¹⁶¹ Another source of high fat, low fiber food is meat. This is why carnivores carry more weight. Meat eaters have been shown to weigh significantly more than vegetarians.¹⁶² High fiber cereal, fruit, and overall fiber intake are associated with lower BMI. Hamburger, beef, fried chicken, eggs, bacon or sausage, and hot dogs are all associated with higher BMI.^{163,164}

“Gotcha” foods that won’t let you go. You need to be aware of some foods that have addictive properties. Addictive foods include chocolate, dairy products (especially cheese), and refined carbohydrates.

Chocolate is just as addictive as drugs. To increase addiction, chocolate stimulates the same opioid receptors in the brain as morphine.¹⁶⁵ Another drawback is the amount of sugar and fat it takes to make chocolate palatable.

The addictive nature of sugar generates phenomenally high levels of obesity.¹⁶⁶ Like cocaine, sugar elevates the addiction hormone dopamine in the brain.¹⁶⁷ The body can get caught in a vicious cycle of sugar consumption. Refined carbohydrates such as sugar, but not just sugar, elevate insulin. Insulin increases abdominal obesity and carbohydrate craving. Abdominal obesity increases insulin resistance requiring the body to produce even more

insulin. Higher insulin levels stimulate more carbohydrate craving. And the saga goes on as the weight piles up and diabetes ensues.¹⁶⁸

The addictive world of animal products is a real source of obesity. Morphine-like substances (beta-casomorphins) in dairy products, especially cheeses, make them very hard to give up.¹⁶⁹

BEER BELLY

Everyone should know the facts about alcohol and obesity.¹⁷⁰ Alcohol intake is associated with abdominal obesity and elevated diabetes risk.¹⁷¹

BIRDS OF A FEATHER FLOCK TOGETHER

Eating with others can be a source of uncontrolled calorie consumption. If eating with others, choose dining companions who share your weight control values.¹⁷²

For those women who like to be aware, the midcycle binge can be a source of uncontrolled calorie consumption. The ovulation phase of the menstrual cycle is associated with significantly more food intake.¹⁷³

PORTION SIZE INFLATION

Can food sneak up on you? Portion sizes sure have. Portion size inflation has definitely occurred between 1977 and 1996; french fry serving size is up 16% or 70 kcal; hamburger sizes are up 25% or 100 kcal; soft drink size is up 50% or 50 kcal; total calories consumed by - Americans are up 11%; and the number of calories eaten away from home are up 53%.¹⁷⁴

Size does matter. Here are some tips on portion size management: Place all food, to be eaten at one meal, on the plate at the beginning of the meal. Purposely reduce customary portion sizes, substitute low-energy-dense foods for high-energy-dense foods, and chew the smaller portions for the same amount of time normally taken to eat larger portions.¹⁷⁵

ONE OF EACH PLEASE—VARIETY STIMULATES GLUTTONY (THERE GO THE POTLUCKS!)

Greater variety is associated with greater food consumption and greater body weight.^{176,177} Do not have too great a variety at a meal; three or four foods are plenty.

CALORIC RESTRICTION

Reducing the number of calories you eat in a day, is referred to as caloric restriction. Calorie, or energy, restriction can restore an immune system impaired by obesity. Obesity impairs the immune system. Caloric restriction has been shown to help restore the immune system.¹⁷⁸ The Okinawan experience has taught us a lot about caloric restriction. The Okinawans eat 40% fewer calories than Americans, have 80% fewer breast and prostate cancers and 50% fewer ovarian and colon cancers.¹⁷⁹ There are some cautions to SEVERE caloric restriction. Some people just eat less of their malnourished diet--the same diet with nutrient deficiencies that leaves them craving food even though they are getting heavier all the time. Side effects of severe calorie restricted diets include; orthostatic hypotension (light-headedness upon standing), fatigue, cold intolerance, dry skin, hair loss, menstrual irregularities, cholelithiasis (gallstones), cholecystitis (inflammation of the gallbladder), and pancreatitis (inflammation of the pancreas).¹⁸⁰

MEAL TIMES

Evening-wear: you tend to wear the food you eat in the evening.¹⁸¹ People who eat in the evening gain more weight.^{182, 183}

Breakfast precedent: start off on the right foot. People who eat high-energy-dense breakfasts eat higher-energy-dense lunches, whereas people who eat low-energy-dense breakfasts eat lower-energy-dense lunches.¹⁸⁴ Skipping breakfast increases insulin resistance and raises fasting cholesterol levels.¹⁸⁵ Skipping breakfast increases student obesity 120%.¹⁸⁶

Punctuality pays off in meal patterns and frequency. Meal regularity significantly lowers the risk of adolescent obesity.¹⁸⁷

Greater variety is associated with greater food consumption and greater body weight. There go the potlucks and all-you-can-eat buffets!

People who eat their meals at the same time every day; consume fewer calories, have better insulin sensitivity, have lower cholesterol levels and maintain a higher fat-burning metabolism.¹⁸⁸ We recommend two

(preferable) or three meals a day, eaten at exactly the same time every day. A two-meal-a-day plan lowers cancer risk. Compared to the two-meal-a-day program, colon cancer risk rises 70% with 3 three-meal-a-day, and 90% for four meals.^{189,190} The risk of colon cancer is increased by snacking. For each time snacking is engaged in throughout the day, the risk of colon cancer goes up 60%.¹⁹¹

“But I’m hungry, I don’t want to wait till mealtime.” Throw a wet blanket on persistent hunger. Hunger, other than at mealtimes, can often be quenched with a glass of ice-cold water. If you feel that you must eat at night, take a drink of cold water, and in the morning you will feel much better for not having eaten.¹⁹²

EMOTIONS AND THE BODY

Happy, sad, bored, lonely? Bring on the food! Some people are emotional eaters, meaning that they eat more when experiencing certain emotions. When these people are stressed or emotional, they eat more sweet, high-fat foods and consume meals that have higher-energy-density.¹⁹³ These emotions often have their basis in childhood experiences. A ten-year study of 9- to 10-year-olds showed that: parental neglect: increased the risk of adult obesity seven times (700%). Children characterized as “dirty and neglected” had 10 times the risk of adult obesity.¹⁹⁴ Obesity can be triggered by childhood stress.¹⁹⁵ The obese are more likely to be depressed, to report childhood abuse histories, to have non-secure attachment styles, and report eating in response to anger, sadness, loneliness, worry, and being upset.¹⁹⁶ Abuse raises the risk of obesity 23% higher for verbal abuse; 27% higher for physical abuse; and 34% higher for sexual abuse.¹⁹⁷ In some cases, obesity is an individual’s way of dealing with fear of intimacy. It is a way of keeping others at a distance.

Obesity – feast or famine? Being insecure about the availability of food is associated with a 30% increase in obesity.¹⁹⁸ Many of us have been programmed, possibly as a result of the great depression of 1929, to save for the future. Fear of want or loss drives a lot of our decisions. The Bible addresses this propensity to trust to what man can do in this way, “And deliver them who through fear of death were all their lifetime subject to bondage.”¹⁹⁹ Jesus Christ came to put these fears away and give us peace and rest.

Don’t go crazy: weight loss reduces psychological symptoms. One study revealed that weight loss was associated with improvements in psychotic traits, paranoid ideation, irritability, interpersonal sensitivity, emotional stability, nervousness, and sociability.²⁰⁰

Dealing with obesity may involve dealing with stress for many people.²⁰¹ Stress management is more successful if accompanied by improvements in spiritual health.²⁰²

Maybe this is because of Jesus’ promise, “Come unto me, all ye that labor and are heavy laden, and I will give you rest.”²⁰³ Joining a group with a leader and organized activities reduces stress and improves weight loss.²⁰⁴ Successful stress management has been shown to improve cholesterol, triglycerides, hemoglobin a1c (in diabetics), hostility scores, and weight reduction.²⁰⁵

GREATER LONG-TERM SUCCESS

Studies of people with long-term weight loss success show that they; exercise 30-60 minutes a day regularly, including some weightlifting; plan their meals, maintaining a consistent eating pattern across weekdays and weekends; track calories, fat, and portion sizes; eat low-calorie, low-fat foods; eat breakfast regularly, and self-monitor weight. Studies of people with long-term weight loss success show that they do not make excuses for not exercising like; no time, too tired to exercise, no one to exercise with, or too hard to maintain exercise routine. People with long-term weight loss do not make excuses for not dieting such as eat away from home too often, or diet and health food costs too much. Studies of people with long-term weight loss success also show that they do not use over-the-counter weight loss products.^{206,207} One of the best predictors of success in weight loss is the monitoring of food and activity. Diary keepers score big.

Brain scans shed light on why people overeat. Self-control is a function of the front part of the brain, the frontal lobes. People successful at restraining their appetites and losing weight have been shown on brain scans to have more active frontal lobes.²⁰⁸ We have been given the power of choice. With exercise, this power is able to help with weight control. “Choose you this day whom ye will serve.”²⁰⁹

TV down time; down the chips, down the cola, down the beer.²¹⁰ Television viewing while

eating increases food intake by an average of 228 kcal.²¹¹ Television viewing, two or more hours per day, increases the risk of weight gain by 35%.²¹²

POWER TO SUCCEED

Temptations to the indulgence of appetite possess a power that can be overcome only by the help that God can impart. But with every temptation we have the promise of God that there shall be a way of escape. Why, then, are so many overcome by temptation? It is because they do not put their trust in God. They do not avail themselves of the means provided for their safety.²¹³

The standard is Jesus Christ. After fasting for forty days in preparation for ministry he said, "Man shall not live by bread alone, but by every word that proceedeth out of the mouth of God."²¹⁴

One of the principles He taught and lived was to think outside of ones-self. His philosophy as expressed and lived was, "The Son of Man came not to be ministered unto, but to minister, and to give his life a ransom for many."²¹⁵ One way to think of this in respect to obesity is that in this world we are to be producers rather than just consumers. Is the world going to be a better place for our having lived in it?

We must recognize and own our problems. When we see ourselves in contrast to Jesus, we feel shame and come to Him in repentance and confession. We admit that we did it to ourselves—that our habits and cravings have controlled us and that without His power to overcome we are doomed to obesity.

Yield To Victory: Choose Life. Seeing Him as the great pattern of goodness and temperance we yield our whole heart to Him and choose to serve Him—make Him Lord of our life. In choosing to serve God, in giving Him the choices of our will, our whole nature comes under His power.

Take Life! We cannot of ourselves excuse the past that has brought on obesity or change our hearts; but having given ourselves to God, we believe that He, for Christ's sake, does all this for us. By faith we became Christ's, and by faith we are to grow up in Him – by giving and taking. We give all; our hearts, our wills, our service. We give ourselves to Him to obey all His requirements – and we take all of Christ, the fullness of all blessing to abide in our hearts, to be our strength, our righteousness, our everlasting helper; to give us the power to obey, and the power to overcome the habits and cravings that leave us obese.

Die to self, appetite, and inactivity. When the craving comes, die to the temptation and choose the power of God to resist. The advice is, "Submit yourselves therefore to God. Resist the devil, and he will flee from you."²¹⁶

Have a replacement. When the urge comes to violate your good judgment, be ready with an alternate activity or plan. Ask God for power and when you have an urge to eat; take a walk. When you have an urge to snack, drink cool water. When the urge comes to take more food than is wise, take even less. You will need to come up with your own alternatives with God's help. "When the enemy shall come in like a flood, the Spirit of the LORD shall lift up a standard against him."²¹⁷

Here is a valuable promise, "There hath no temptation taken you but such as is common to man: but God is faithful, who will not suffer you to be tempted above that ye are able; but will with the temptation also make a way to escape, that ye may be able to bear it."²¹⁸

In this way you will find true satisfaction. If you are not right with God, "ten women shall bake your bread in one oven, and they shall deliver you your bread again by weight: and ye shall eat, and not be satisfied."²¹⁹ On the other hand, "The meek shall eat and be satisfied: they shall praise the LORD that seek him: your heart shall live for ever."²²⁰

Once you are on the track to optimal health – and you WILL be on the track to optimal health – find someone else to help; it's part of the program. "And if thou draw out thy soul to the hungry, and satisfy the afflicted soul; then shall thy light rise in obscurity, and thy darkness be as the noonday: And the LORD shall guide thee continually, and satisfy thy soul in drought, and make fat thy bones: and thou shalt be like a watered garden, and like a spring of water, whose waters fail not."²²¹ We are blessed in blessing others. It is more blessed to give than to receive.

THE BOTTOM LINE

Obesity is at an all-time high, largely because people are eating high calorie foods while engaging in little or no calorie burning physical activity.

The key is to replace high-energy food items with unrefined whole-plant food items, replace all beverages with water, and replace sedentary habits with physical activity.

IN A NUTSHELL:

- Plan your meals; eat modest portions of low-energy-dense/high nutritionally dense whole plant foods. Keep the menu simple.
- Put all the food you are going to eat on your plate at the start of the meal and keep written records of what you eat, etc.
- Eat breakfast every day and keep a strict schedule, skip dinner if you must skip a meal. Fasting one day a week can be helpful.
- Eat only natural food that does not feed addiction or overpower rational decision-making. Eat for “strength and not for drunkenness.”
- Chew your food well – choose food that requires chewing.

- Drink plenty of water between meals: 30 minutes prior or 2 hours after.
- Exercise regularly: walk outdoors in the fresh air and sunshine, engage in some resistance exercises or activities.
- Take regular time for adequate sleep.
- Establish a plan for your known weaknesses and with God’s help make them your strengths.

For further ideas on how to incorporate what you have just learned into your daily life, see the chapter entitled, “How Can I Apply Healthy Principles in My Daily Life”.

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