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AUSTRALIAN NATURAL BODZ

THE EVIL OF CARBOHYDRATES

FINALLY AN HONEST SCIENTIFIC REPORT ON CARBOHYDRATES. BRIAN PESKIN REVEALS HOW AND WHY EXCESS CARBS ARE THE WORST FOOD YOU CAN CONSUME IF YOUR GOAL IS TO STAY LEAN, FIT AND HEALTHY.

By Professor Brian Scott Peskin

Professor Brian Scott Peskin is considered by many to be one of the world's most respected medical researchers in the field of cancer and heart disease, and America's #1 Life-Systems Engineering scientist. much of this material is based on the Professor's landmark book, The 24-Hour Diet.

"I warn you in advance that you will be shocked at much of the science you are about to discover. Much of it will be directly opposite to what you are doing. When you replace your present regimens with this scientifically correct information,the results will be amazing."

My previous article focused on the Parent Essential Oils (PEOs) that are the basis of natural steroids. The next series of articles focus on what a natural, drug-free bodybuilder should eat to maximize muscle while decreasing fat and decreasing recuperation time, too.

Let's Take a Closer Look At the Science.

In my first article, Vol.1 Issue 2 you discovered the amazing benefits of PEOs (Parent Essential Oils) to increase natural testosterone levels. They help you increase energy naturally through increased cellular oxygenation, they decrease painful lactic acid buildup and maximize peak performance with more muscle growth.

This series of articles will explain what a natural, drug-free bodybuilder should eat and why, based on science—not opinion. Because much of this important information lies buried in the medical biochemistry and physiology textbooks, most bodybuilders will never see any of it.

For the bodybuilder who wants maximum muscle with minimal bodyfat, knowing the facts in these articles is vital. Also, because what I will reveal here is often contrary to what you have heard or even what your trainers tell you, I purposely give the detailed science so you can see the truth yourself and then make an informed choice.

Back when I trained with bodybuilding legend Lee Labrada after he had just won the coveted "Night of Champions" title, I was unaware of this vital information. So was he. Everyone was following the so-called "high complex carbohydrate / no fat / minimal protein" recommendations.

Today, almost two decades later, I now understand the basis of my frustration in not seeing results as fast as I would have liked, despite of the fact that Lee said I was the hardest working non-professional he had as a student. The dietary approach was wrong. I now understand the severe limitations of that approach.

I warn you in advance that you will be shocked at much of the science you are about to discover. Much of it will be directly opposite to what you are doing. When you replace your present regimens with this scientifically correct information, the results will be amazing. Because you will have less bodyfat year-round, getting into contest shape will be quicker and easier. Starvation and exhaustion will become a past memory, too.

Because your muscles are made of protein comprising well over half of your bodyweight, with natural fats making up the rest and carbohydrates a mere 1% [1], I'll start by detailing the evils of carbohydrates. That's right, carbohydrates are bad. But first I want to make something very clear:

The Calorie Theory is Wrong

Calories In - Calories Out = Fat Stored
WRONG, WRONG, WRONG!

We've all heard endlessly that all that counts in losing fat is calories. Many bodybuilders follow this advice because it sounds so logical. However, it is tragically flawed. As you may imagine, the type of food you eat makes all the difference. Where well-intentioned nutritionists make their mistake is that they don't understand that people eat mainly for body structure, not merely energy production.

The calorie theory mistakenly assumes that all the food we eat gets burned up for energy like wood in a furnace. Over 100 years ago in 1893, medical physicist Adolph Fisk, M.D., conclusively showed this analogy is wrong because humans are chemical engines, not heat engines! This is why the entire theory is worthless.[2] This massive mistake has caused millions of people to become overweight yet still hungry. The type of food you eat makes all the difference in maximizing muscle and minimizing fat.

The Evils of Carbohydrates: All of Them are Sugar in Disguise

That's right. All carbohydrates, less their non-food fiber, are sugar in disguise. Why doesn't the fiber count? The Textbook of Medical Physiology tells use plainly that fiber (cellulose / wood) can't be digested by a human, so it isn't counted. I hope you don't think eating sawdust is good because it isn't.

A few things every bodybuilder needs to know …

Carbohydrates are NOT Your Body's Preferred Energy Source![3]

That's right. Everyone mistakenly thinks that carbohydrates are your body's preferred energy source—its

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We've all heard endlessly that all that counts in losing fat is calories. Many bodybuilders follow this advice because it sounds so logical. However, it is tragically flawed. As you may imagine, the type of food you eat makes all the difference. Where well-intentioned nutritionists make their mistake is that they don't understand that people eat mainly for body structure, not merely energy production.

number one fuel. This is completely WRONG. Yet I have never once heard the truth about this from any athletic trainer, physician, or nutritionist. This tragic mistake is the primary reason Americans are overweight. We have been misled into making the wrong food the basis of our diets. If the people we trust and follow have such a faulty understanding of one of the most basic nutritional concepts, isn't it time to re-think who we follow?

Here's what Basic Medical Biochemistry clearly states on pages 358-359:
"The body oxidizes [burns as fuel] more fatty acids each day than any other fuel.
"Fatty acids [fats] are the major fuel in humans.
Here's what the Textbook of Medical Physiology (9th edition) states, buried on page 866:
"[A]lmost all the energy requirements of the body can be provided by the oxidation of the transported free fatty acid without using any carbohydrates or proteins for energy." [Note: This also answers the question of muscle wasting from lack of carbohydrate consumption; it's another myth.]

These medical textbooks make it crystal clear that carbohydrates are NOT the body's preferred energy source; your OWN body fat is SUPPOSED to be—but, as you shall soon discover, Nature's natural mechanism keeping you lean-for-life is being short-circuited.

How much sugar is in your entire system of 10 pints of blood?

I originally thought it had to be at least 100 teaspoons worth. When I calculated it out, the answer was LESS than 1 teaspoon. That's right. There is less than 1 teaspoon in your entire system. [4] Medical textbooks verify this fact.
For decades, the average American has unknowingly consumed over 60-70 teaspoons of sugar (in the form of carbohydrates) each day in items such as: juice, oatmeal, fruit, so-called "heart-healthy" cereals, rice, bagels, spaghetti, food bars, etc. [5]

WARNING: Carbohydrate Caution — They Add Up Fast!
Every 20 calories = 5 grams = 1 teaspoon of sugar. How many fattening teaspoons of sugar are you unknowingly consuming each day

Insulin, a Response to Carbohydrates, Makes You Fat!
It's all in the Textbook of Medical Physiology on pages 974-975:
"…[I]nsulin promotes deposition of fat ….
"Insulin promotes glucose transport through the cell membrane into fat cells [making fat cells larger]…".
Therefore, when insulin is not available [caused by the response to carbohydrates], even storage of large amounts of fatty acids transported from the liver in the lipoproteins is almost blocked.
"All aspects of fat breakdown and use for providing energy are greatly enhanced in the absence of insulin [generated from carbohydrates]."
Minimize the insulin production and you AUTOMATICALLY minimize the fat production, too.

Only 1% of your pancreas is made to treat the carbohydrate (sugar).

The remaining 99% of your pancreas digests the protein and fat. [1] Therefore, based on physiology there is no way carbohydrates are designed to be your major food source.

Eating 6-8 "small meals" a day is extremely harmful because it can turn you diabetic.

Your pancreas is made to produce insulin as a response to carbohydrates just 2-3 times a day. Anything more is a harmful overload. Diabetes has become the #1 epidemic in the world with no end in sight. These recommendations make it worse.

Don't I need to "balance blood sugars" throughout the day?

No. Your body does this automatically, as the medical textbooks make clear. [5] This is another example of more unscientific misinformation.

Insulin, produced mainly as a response to carbohydrates, stops fat-burning and the world's #1 medical physiology textbook makes it clear:
"When no insulin is available [response to carbohydrates]…fats are poorly, if at all synthesized [you don't get fat]…" and "an excess of carbohydrates in the diet not only acts as a deterrent to fat-burning but also increases the fat in the fat stores [making you fatter]."
This is a double negative whammy![6]

Carbohydrates make you hungry because of their insulin response

Ask any diabetic when they are the hungriest and it is always when they shoot the most insulin. Everyone knows the old adage, "I'll bet you can't eat just one" cookie or potato chip. The more carbs you eat the more you want. This is the direct opposite to eating protein or natural fat like a steak. The more steak I eat, the LESS I want, right? Of course.

Aren't there "bad" carbs and "good" carbs?

No, all carbs are ultimately the same. My standing joke is that a complex carb like organic rice or oatmeal makes you just as fat—merely a few minutes later than a soda or candy bar! That's right. When the response curves from a complex carbohydrate are studied, the difference is a mere 15 minutes for the sugar to start becoming fat and a few hours later your resting blood sugar is actually higher, putting you on the path to diabetes.

Real Life Case Study
My wife is a Type I diabetic; her pancreas produces very little insulin naturally. Over a decade ago we performed an experiment:
She consumed two pieces of organic "sprouted" whole-grain bread. This was supposed to be a wonderful complex carbohydrate that released the sugar "slowly" into her bloodstream nothing could be better for her, according to the GI proponents.

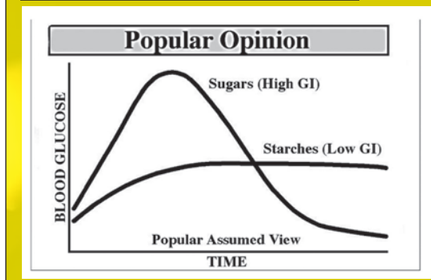
Taking no insulin, she measured her sugar level 15 minutes later. To her amazement and shock, her sugar level had skyrocketed.

Back then, I knew that the Glycemic Index was incorrect, but I had no idea why. Now we know why—there is no correlation between the GI and insulin output. The medical journals tried to correct this fallacy but few of us saw it. As reported in the January 2002 issue of Diabetes Care, **"New Diabetes Nutrition Guidelines Play Down Importance of Carbohydrate Source" it concluded:**

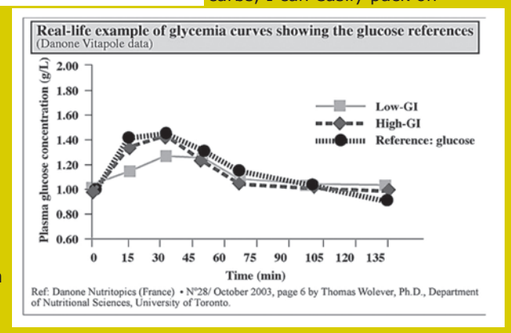
"De-emphasize the importance of the glycemic index of foods.
" The source of the carbohydrates is not as important as the total amount…."

A year later in 2003, Flint, et al., British Journal of Nutrition 2004 Jun; 91(6):979-89, confirmed this upsetting finding:
"…No association was found between predicted and measured GI.
"…There was no association between GI and II [Insulin Index —the amount of insulin generated].
"…In conclusion, the present results show that the GI of mixed meals calculated by table values does not predict the measured GI…."

Ice cream has a lower GI than a baked potato implying that sugary ice cream is better for you. There is something DRASTICALLY WRONG with this picture.



In the second graph, people were given 50 grams of various carbohydrates.
This is equivalent to approximately ten (10) teaspoons of sugar.
In truth, there is very little overall difference in the real-life curves in the 2nd graph.



(Reference: "Slowly digestible carbohydrates," Danone Nutritopics (France), No. 28, October 2003, page 6" Real-life example of glycemia curves showing the glucose references.)
As you can see, from the second chart's real-life result: The "low" vs. "high" GI designations both generate increased glucose levels for approximately 30 minutes. The difference in peak concentrations of the lower GI food is just 0.15 grams/liter a somewhat insignificant amount (less than 1/6th teaspoon).
Furthermore, the total amount of sugar is the same over time. It may look like less, but it isn't. We keep getting misled.

Water Weight Takes a Hike!

Every 28gms of carbs requires at least AN ADDITIONAL 3 times that in water in order to process them. Glycogen is very inefficient as an energy storage source in large part because so much water has to be stored with it.

Water is very heavy. A gallon weighs close to 4 kilos, which means a litre of water packs on aprox 1 kilo. If I overindulge on the weekend from too many carbs, I can easily pack on another 2 Kilos. The great news is that you will soon discover how to lose it all extremely quickly.

A high-carbohydrate diet should be renamed the "Bloating Diet."
I always feel like a water balloon when eating too many carbs, and it doesn't feel good to be bloated 24-hours a day.

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"Everyone mistakenly thinks that carbohydrates are your body's preferred energy source—its number one fuel. This is completely WRONG. Yet I have never once heard the truth about this from any athletic trainer, physician, or nutritionist".

Carbohydrates Known to Lower Immune System Known in 1977[7]

That's right. Bodybuilders can have a lowered immune system because of all that extra stress they place on their body. Anything that compromises your immune system is awful because it negatively impacts your training. If you are sick you can't train well. Yet carbohydrates are known to suppress the activity of your immune system. Analyzing blood drawn from subjects, white cell activity was measured before and after various doses of carbohydrates (sugar): 6, 12, 18, and 24 teaspoons worth. Remember, the average person consumes at least 70 teaspoons of sugar equivalents (carbohydrates) a day, often consuming over 20 teaspoons of sugar at a single meal. DECREASED white blood cell activity was directly correlated with carbohydrate consumption. The group consuming the 24 teaspoons had virtually complete immobilization of white blood cells within an hour after eating. The immunosupression occurred for up to two hours with adverse effects of blood cell activity continued for up to 5 hours.

Following wrong popular nutritional advice to eat 5-6 times a day with a carbohydrate-based diet can be deadly to your immune system and will also negatively impact your training.

Specific Sugars NOT Required — Your Body Makes Them

Eating excess carbohydrates (more than a mere 100gms a day) prevents the body from burning fat and increases stored body fat. As Basic Medical Biochemistry—A Clinical Approach on pages 24 and 394 and Textbook of Medical Physiology, pages 869, 871 and 936, state: **"Specific sugars [carbohydrates] ARE NOT REQUIRED in the diet." Note: This is because your body makes them.**
If anyone cared to look, Nutrition for Fitness and Sport by Melvin H. Williams, Brown and Benchmark Publishers, Chicago, 1995, makes clear on page 87 that no dietary carbohydrate is needed.

From what the nutritional experts, the government, and physicians have told us for decades, we would expect the answer to be "lots of carbohydrates," but it isn't. In fact, the scientific answer is shocking: "However, the National Research Council has not established an RDA for carbohydrates, probably because the body can adapt to a carbohydrate-free diet and manufacture the glucose it needs from parts of protein and fat." (Note: As you shall soon see, this is another reason to consume more protein.) Please understand it is next to impossible to exclude all carbohydrates, and I am not telling you to do this, so no one should fear not getting enough.

WARNING: Carbohydrates STOP Fat-Burning Cold!

For fat to be stored, dietary carbohydrate must be consumed [8].

Figure Competitor Nicole Sacre

To repeat: the Textbook of Medical Physiology, page 881, makes it quite clear:
Fat is stored ONLY When You Eat Any Type of Carbohydrates. This medical fact can't be repeated enough:
As Basic Medical Biochemistry - A Clinical Approach, pages 476 and pages 510-12, makes clear, ***Adipose tissue (fat) is stored ONLY when carbohydrates are eaten.***

From Principles of Medical Biochemistry, page 372: "…fatty acids [from eating fat] cannot be converted into carbohydrates. Carbohydrates, on the other hand, can be converted into triglycerides [excess bodyfat]." and "…Excess energy from dietary carbohydrate is stored away as triglyceride in adipose tissue [bodyfat]." You had better make sure that any excess carbohydrates consumed over what you require right now are burned up in exercise. Otherwise, the carbs will be converted into excess bodyfat. If you drink a glass of orange juice, you now have consumed the chemical energy to run 7/10th of a mile! If you don't run right away or perform the equivalent work in exercise, that energy gets store as bodyfat, period. Note again that the fatty acids (from eating natural fat) CANNOT be converted into bodyfat!

What About "Fat is Only Burned in the 'Flame' of Carbohydrates?"

Once again, wrong:
Stryer's Biochemistry, the gold standard of medical textbooks, on pages 612 and 638, makes this fact quite clear with this quote:
"Fat does not burn in the flame of carbohydrates."
One of the biggest myths that is completely wrong is that without consuming lots and lots of carbohydrates, precious muscle will be cannibalized. You know how difficult it is to build muscle. Do you really think that Nature is so capricious? No, not at all.

I'll end this discussion of carbohydrates with some little-known facts about heart-health.
A high-carbohydrate diet is anything but heart-healthy. A 60% carbohydrate/25% fat diet COMPARED TO a 40% carbohydrate/40% fat diet resulted in incredible differences.
Dr. Gerald Raven of Stanford University School of Medicine published, in American Journal of Cardiology 2000 85:45-48:

Elevated triglyceride levels persisted through high [60%] carbohydrate diet.

High [60%] carbohydrate diet associated with increases in both fasting (when not eating) and postprandial (after eating) triglyceride concentrations.

"Substituting carbohydrates for saturated fat leads to higher cholesterol in the blood. It is appropriate to question wisdom of replacing dietary fat with carbohydrates." Carbohydrates raise the risk of heart disease.

The last two statements from Dr. Raven, published in one of America's top heart journals, tell it all. Carbohydrates cause a worse blood chemistry than saturated fat.

Is there more confirmation?
Absolutely.
Carbohydrate consumption puts you on the path to a heart attack, too:
As the Journal of American Medical Association; 2000; 283:221-228 makes clear:
"Elevated insulin [generated from eating carbohydrates] causes blood clotting, which blocks arteries."

Fiber from carbohydrate is worthless to protect you against cancer.
Fiber increases cancer risk, too. That's right. It's shocking but scientifically correct. We eat lots of carbs to get "important" fiber. Besides making us fat, we unknowingly increase the risk of contracting cancer, too.

The New England Journal of Medicine (Jan. 21, 1999, Vol. 340, No 3), America's premier medical journal, reported that: ***Fiber did nothing to improve "colon efficiency."***

The following year Lancet (October 14, 2000; 356:1286-1287, 1300-1306), the world's premier medical journal, published the same finding again: "Those people eating the most fiber get the most colon cancer! The fiber found worthless to protect against colon cancer was the highly promoted soluble fiber".

Close to a decade later, the truth still isn't known by most physicians or their patients. Fiber actually depletes you of precious minerals. Among other functions, minerals are critical for energy production. Women get less critical calcium by consuming lots of fiber:
"Natural sources of fiber, such as cereals and fruits, generally have a depressing effect on absorption of minerals such as calcium, iron, zinc, and copper. Imagine taking mineral supplements and still going into a negative balance for the very minerals that are being supplemented!" [9]

Once again, the fiber fallacy is presented in the Journal of Clinical Nutrition, 2000, 71:466-471 but you likely haven't heard this one, either: "Women eating the most fiber and the lowest amount of fat had 20% lower calcium retention".

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If you are diabetic then you need to know this.

A carbohydrate diet is awful for a diabetic. The American Journal of Clinical Nutrition, October 1997; 66:4(S) states:

"In type II diabetics, the carbohydrate diet led to impaired glycemic [blood sugar] and insulin responses. As well as to hypertriglyceridema [high triglycerides]."

Student Companion for Stryer's Biochemistry makes it clear on page 321:

"In the human diet, carbohydrates constitute approximately half the total caloric intake [closer to 60% now], yet only 1% of tissue weight is carbohydrate."

Given this physiology, does eating a high-carb diet make any sense at all?

Carbohydrates Raise Both Insulin and Cholesterol Levels

Basic Medical Biochemistry, pages 475 and 566, make clear that:

Insulin production, a response to consumption of carbohydrate, raises cholesterol levels. American and Australia has been subjected to a 50-year carbohydrate eating experiment. In spite of more exercise, people have never been fatter or more diabetic. Something is wrong and the world's best medical science clearly shows us a new path.

After discovering all of this new science, how could anyone in their right mind ever again think that a high-carbohydrate diet should be used for a bodybuilder requiring peak performance, a highly tuned metabolism, and maximum muscle with minimal fat? No one.

My next article in issue 5 will detail the power of protein. Until then, for a complete explanation of the facts covered in this article, with even more information, my book, The 24-Hour Diet, is available from www.brianpeskin.com. Every bodybuilder needs this valuable information in their personal library.

Common Questions and Answers

My approach is simple. Science matters, instead of half-baked often-popular, yet wrong recommendations. Let science improve every aspect of your training and your life.

Q: What is the ideal ratio of protein/fats/carbs for a natural bodybuilder with the goal of building muscle and keeping bodyfat to a minimum?

A: 40-60% PROTEIN, 20-40% Natural FAT, and 20%-30% CARBOHYDRATE, with the total being 100%The reason is that the average person is 50% muscle. A bodybuilder has much more than 50% muscle and muscle's #1 requirement is protein. Minimize the carbs.

Q: Is it true that the best strategy is "bulking up" (fattening up) and then trying to "cut up" (strip away the fat) to reveal a bigger more muscular physique?

A: No! It is a tremendous waste of time and effort to then lose this additional body fat.

Q: Is there a significant difference between complex and simple carbs and how they all end up as sugar in the blood?

A: No. Because of their tremendous and rapid insulin response, carbs make you fat. Period.

Q: What about the effect of insulin on muscle growth?

A: It is very low and is best stimulated by protein, not carbohydrates.

Martin Sifredi ANB Under 80kg Mr Australia
Photo: www.peterkotsa.com

Q: Is it true that growth hormone release is suppressed by high insulin levels?

A: Yes. Biochemically, carbohydrates stop important growth hormone production.

Q: How many times a day would you suggest that a bodybuilder eat?

A: Twice (2 meals) plus a small snack. Based on physiology, fewer, bigger meals are best.

Q: Are pre-workout and post-workout key times to take in nutrients?

A: Because of a bodybuilder's tremendous physical overloads, PEO-containing natural oils are best both before and after workouts with naturally occurring protein-based foods, not in protein shakes. See the next question.

Q: What about protein supplements/powders, and are there any particular powders that should be avoided?

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A: The only reason for "powders" is to minimize the fat you take in. They (the powders) should be minimized so your digestive system is made to work. Soy should be avoided as it is a hormone disrupter and originally was mainly designed as food for pigs.

Q: Does gaining bodyfat help with increasing lean muscle mass?
A: No, not at all.

Q: What would be the best approach for replenishing glycogen stores for a bodybuilder? Post workout supplements, food etc?
A: Because you store very little glycogen, only about 3/4th of a pound (The Student Companion for Stryer's Biochemistry, page 624), only a small amount of carbohydrate is required to accomplish this. With 20-30% of your diet already carbohydrate-based, nothing more is required.

Q: Before bodybuilding competitions, bodybuilders carb deplete and then carb load. Is this warranted?
A: Carbohydrates absorb water like a sponge. Every gram of carbs requires 3 grams of water — a tremendous excess amount, so you decide if this makes sense for you.

Q: As bodybuilders have a higher than normal glycogen storage capacity, what would be a sensible approach to carbing up to fill glycogen stores, yet not spilling over with water retention under the skin? What type of carbs would create a better effect?
A: Since glycogen reserves are very low, even in bodybuilders, to keep them full (both in the liver and the muscles) nothing special is required. Taking lower carbs is better to decrease water retention.

Figure Sensation Ellena Tsatsos
Photo: www.bigshotdan.com

Q: Is boosting some insulin after my workout a good idea to promote muscle growth?
A: No. This is not needed at all. After your workout, eat protein along with PEOs and you'll get all the muscle growth you need.

Q: Is there a difference between how women handle carbohydrates and men? Are women more sensitive to sugars?
A: There is no significant physiologic difference. However, since women weigh less they need to eat fewer carbs to keep from gaining excess bodyfat. Also, carbohydrates are more harmful to a woman's delicate hormonal system than they are to a man's, but regardless of gender, never forget that carbohydrates stop important growth hormone production.

For discoveries that can increase your health and athletic performance visit:

The 24-Hour Diet, available at www.brianpeskin.com

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3. Basic Medical Biochemistry - A Clinical Approach, pgs: 29, 45, 203, 272, and 357.
4. The recommended 60% carbohydrate diet comprising 2,000 calories translates to 60 teaspoons of sugar. Every 20 calories carbohydrate = 1 tsp. sugar. Therefore: 60% x [2,000 calories/20 calories/tsp] = 60 teaspoons of sugar! Americans have unknowingly increased their diabetes risk for decades! Today, that figure has increased to closer to 100 teaspoons a day. How much are you consuming?
5. A "ballpark" calculation shows that normal blood sugar concentration is about one gram per liter—just about one part per thousand. (A gram is approximately one-fifth of a teaspoon and a liter is a little more than a quart.) Adults have about five liters of blood, so we have about five grams of glucose in our bloodstream. One teaspoon has about one-hundred-twenty drops, so a typical adult has about just one hundred (120) drops of glucose in their bloodstreams. I was shocked at this small amount, too. The technical measure is 70-90 mg of carbohydrate /dl.
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