



GETTING NUTRIENTS TO THE CELLS

No matter where annoying symptoms may erupt, the cause can usually be traced back to your main filtering and processing plant—the liver. To the tune of “The knee bone connected to the thigh bone” sing: “The kidney connected to the liv...er; the eye ball connected to the liv...er; the colon connected to the liv...er.” Add as many verses as you want. In other words, if Human sends the liver cells more toxins than they can handle and not enough oxygen and nutrients, Human’s kidneys, heart or some other body part will weaken.

ENZYMES ON PATROL



What’s the purpose of it all? I’m not asking the big spiritual question right now. I mean what is the purpose of eating and processing what Human ingests? The purpose is to give each of us cells the

material we need to produce energy. If we produce enough energy Human will feel positive enough to enjoy life and Human will have physical energy to spare at the end of the day. To produce this energy we work with the raw materials we take from the food you give us—amino acids, glucose, and fatty acids. This process is called metabolism. Metabolism is simply making use of your food. Let’s track part of the process for turning food into energy.

First, protein. Remember you don’t need a lot of protein to give us the necessary amino acids—we manage beautifully when about 10% of your food is high quality protein. That won’t take up much room on your plate. Once the amino acids are prepared, the liver cells make executive decisions—some must be stored to make hormones and enzymes as needed; some are returned to the blood to build blood plasma and some are sent for us cells to build and replace ourselves—including strong muscle cells and wrinkle-free skin. As

the liver cells prepare amino acids, they produce ammonia as a by-product. The ammonia is combined with carbon dioxide to produce urea. As long as we don't produce too much urea, we safely ship it via blood to the kidneys for elimination. Too much protein means we produce too much ammonia and urea. Too much ammonia or urea severely interferes with our ability to produce energy.

Us cells produce ATP or adenosine triphosphate. ATP is to Human what jet fuel is to the rocket-booster that launches space capsules. ATP spells energy! Glucose and oxygen are the key materials to produce ATP. Given a healthy diet, a relaxed attitude, a good chew and exercise, we can produce 38 energy molecules (ATP) for every glucose molecule we use. That's efficiency! Good thing as your liver cells use ATP to power some 65,000 jobs. No need to be tired. Of course the electrons from amino acids and fatty acids are also crucial to efficiently produce ATP and operate our power plants efficiently.

“An American child at the turn of the last century consumed between 5 and 10 pounds of sugar per year. His counterpart today (Year 2000) ingests 150–175 pounds.”

Oxygen and Aging,
Majid Ali, M.D

We get glucose from two main sources. Us cells love one source while the other wears us out. We can process glucose from vegetables and whole grains in an orderly fashion. This allows liver cells to release glucose into the blood stream gradually. Glucose from refined sugars and flours flood the blood stream as we don't have the nutrients or roughage from the whole food to slow down the process. When Human ate a lot of naked sugars, they bonded with protein to form rigid yellowish compounds that thickened arteries, stiffened joints, flabbed muscles and weakened organs. A bad scene! Now that Human eats more vegetables, some whole grains and only seldom refined sugar, the liver cells are able to control the flow of glucose—they store about a half-day supply of glucose. This keeps blood sugar levels steady throughout the day.

Brain cells get mightily upset if we don't keep blood sugar levels balanced—it gets hard to think. That's why it is important to eat regular meals. When Human skipped meals, the blood sugar level dropped. Nerve cells in the brain instantly sent electromagnetic signals to the liver and pancreas cells screaming for glucose. In response, Human craved sugar so would grab something processed and sweet. This type of food floods brain cells with glucose as the sugar is absorbed instantly. Nerve cells sent out the alarm to reduce blood sugar levels quickly. The liver and pancreas over-reacted to mop up the excess glucose. Brain cells suffer again as sugar levels dip drastically. The seesaw effect stopped when Human started eating vegetables and whole fruits. Now we get the necessary glucose gradually enough to feed the brain and keep blood sugar levels in check.

While many of us have tried one or more of the following Liver/Gallbladder flushes with good results, it may be wise to consult a natural health practitioner. A health practitioner warns, "...it can and does occasionally send people to the hospital with an attack of cholangitis if a stone becomes lodged in the biliary duct." (<http://chetday.com/gallbladderflushes.htm>)

Liver/Gallbladder Flush

You may want to try the following daily for one week. Then take a break for one week and keep repeating until you feel improvement.

On arising with an empty stomach:

1. Blend the following: 8 ounces of freshly squeezed organic citrus juice. (Oranges + a lemon.) with 8 ounces of purified water, 1 clove of garlic, 1 Tbsp. of olive oil and a thumb of fresh ginger. If citrus is a problem for you, use organic apple juice.
2. Gradually increase the olive oil to 4 Tbsp. and increase the garlic and ginger as well.
3. For greater effectiveness, add liver loving herbs in powdered or tincture form. (1/2 tsp. if powder or 60 drops of tincture.) Choose from barberry, oregon grape, milk thistle, wormwood, burdock, dandelion, beet or artichoke.
4. 15 minutes later cleanse your system by drinking two cups of peppermint or ginger tea.

Suggested as a good flush to repeat 4 times a year for one or two cycles.

Ancient Cleansing Formulas, Sam Biser

Liver/Gallbladder Flush

Week 1: Drink daily ½ ounce of freshly squeezed lime juice + ½ ounce of extra virgin olive oil.

Week 2: Drink one ounce of each daily

Week 3: Drink 1½ ounce of each daily.

Drink daily until a 'tarry' bowel movement: should be darker, even black, and less formed. This is gallbladder sludge.

No More Heartburn, Sherry Rogers, MD

Amish Remedy for Gall Bladder

Upon arising take 1 Tbsp. of fresh parsley juice with 1 Tbsp. pure water. Eat a diet of fresh greens with cold-pressed olive oil dressings and apple juice or apples. Before retiring at night, drink the juice of 1 or 2 fresh lemons, undiluted, then lie on your right side for 20 minutes. Good to repeat for 2 to 4 days.

The Ancient Cookfire, Carrie L'Esperance

Other Sources for Liver/Gallbladder Flushes

Your Liver...Your Lifeline, Jack Tips, ND

The Cure for All Diseases, Hulda Clark, ND, PhD

<http://chetday.com/gallbladderflushes.htm>

Let's go have a better look at Human's pancreas. It's an elongated shape tucked behind the stomach. There are two highly specialized types of cells in here. One group of cells produce a hormone called insulin. These cells inject insulin into the blood stream to keep blood sugar levels balanced. When too much bread, pasta, and sweets are eaten, these cells respond by squirting out more than needed in order to protect the brain and bring the sugar level down quickly. Human then suffered from low blood sugar or hypoglycemia! Mood and energy swings from wildly fluctuating sugar levels kept Human from enjoying the delights of each day and made it difficult to handle the day's challenges. With some Humans the constant call to produce insulin wears these insulin-producing cells to the point they can no longer produce enough. Without enough insulin, blood sugar levels remain high. Humans call this condition Type 1 Diabetes.

The other group of specialized cells in here produce the enzyme-rich mixture to break down food particles. You'll recall when we were squeezed out of the stomach on our journey through the digestive tract we got hosed with a strong flow of alkalizing bicarbonates and enzymes. Pancreas cells manufacture several cups of this enzyme-rich mixture every day. When meat was regularly the largest portion of Human's evening meal, these cells grew fatigued trying to produce enough juice. And, the extra effort the cells put forth to digest excess meat and cooked foods enlarged the pancreas. Human used to have a bulge around the middle from a swollen colon, an enlarged pancreas and fat that was stored from excess sugars. Human has a flat tummy now and the pancreas cells are replacing themselves with robust offspring again.

Pancreas cells also struggled when Human drank coffee with meals. The coffee immediately stimulated the pancreas to produce digestive enzymes. The enzymes got squirted into the small intestine before the food bolus arrived. Later, when the stomach released its contents, the pancreas had already exhausted its enzyme-rich mixture. The cells struggled to quickly produce more but this only added to their fatigue. As a stimulant coffee stresses a lot of us cells ... pancreas, liver and especially the glands. We'll talk about glands and hormones later.

Human has come to appreciate the importance of these pancreas cells. They play a key role in preventing cancer. Pancreatic digestive enzymes in the intestinal tract are great

TIP FOR A HEALTHIER LIVER AND GALL BLADDER.

While consulting a nurse practitioner about my gall bladder problems, she explained why she left a career as an operating room nurse to go into private practice. She felt the numerous gallbladder removals she assisted with were unnecessary. Her experience taught her that repressed anger is the cause of liver and gall bladder problems. She coaches her clients to express their anger in suitable ways to strengthen the liver and avoid gall bladder problems.

patrol officers for spotting and stopping the growth of cancer cells in their formative stage. Cancerous cells are a natural part of your body's growth and injury response. As long as Human keeps the liver and pancreas cells strong, they'll keep enough enzymes circulating in the blood to help stop cancerous growth.

Your liver cleanses from 1:00 to 3:00 a.m. It takes at least 6 hours after a meal for the nutrients to reach the liver cells. If you eat a big meal in the evening it means the portal vein delivers nutrients and toxins at a time when the liver cells should be cleaning themselves. Eat lightly in the evening to allow your hard-working liver cells to cleanse.

Liver and pancreas cells need exercise. They only move or get massaged when surrounding tissue moves so they depend on Human to have a good laugh, play tennis, work out in a gym or get out for walks. This gives these cells both a good giggle and a good jiggle.

"But ... but ... but," Human balked. "It means a lot of change! My friends and family aren't making these changes and it's tough to do it on my own." Human didn't want to make these changes. Eventually Human got fed up feeling tired, being negative and getting sick so much. That's when Human decided it was time to make change. Human wanted to feel energetic, be positive and stay healthy. Human took one step at a time so changes to diet came slowly but surely. Now that Human listens to us and treats us better, Human is able to better enjoy the feeling of an open heart and better able to love life and to serve life.

We'll flow out of the liver in the blood stream to have a better look at the blood.

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