

450 Pleasant Street, Brockton, MA 02301 • 508 583-2565 • www.baritzchiro.com

Bone Health and pH

03/17/11, 04/01/11

Good bone mineralization is essential to living a healthy life. 99% of the body's calcium is contained in the bones and teeth. Calcium makes up about two-thirds of a bone weight, with collagen (a protean matrix), water and other nutrients making up the remainder. Bone cells called osteoblasts produce 85% of the collagen contained in the bone and this collagen is more essential for bone health than calcium! The remaining 1% of the body's calcium is involved in multiple functions, including neutralizing acids to help keep the body in balance. This is important because if lifestyles are too acidifying the body will attempt to neutralize the acid by dumping calcium from the bones into the blood. Acid excess over time contributes to demineralization and osteoporosis.

The skeleton is a dynamic system and studies show that any one time, about 10% of the system is in the process of being formed or destroyed. In adult humans, the skeleton is completely replaced once every 10 to 15 years.

Understanding pH

pH is a measure of the acidity or alkalinity of a solution. pH is measured on a scale of 0 to 14. A pH of 7 is neutral with the numbers below 7 progressively more acid and the numbers above 7 progressively more alkaline. Battery acid for example has a pH below 1 and bleach, being very alkaline has a pH of about 13. Human blood has a slightly alkaline pH of 7.34 – 7.45. In test rats a pH reduction of just 0.2 caused a 500-900% increase in bone calcium losses. Human studies show that venous blood pH reduction from 7.37 to 7.33 resulted in significant calcium release from bone.

A seven-year study conducted at the University of California - San Francisco on 9,000 women showed that those who have chronic acidosis are at greater risk for bone loss than those who have normal pH levels. The scientists who carried out this study concluded that many of the hip fractures prevalent among middle-aged women are connected to high acidity caused by a diet rich in animal foods and low in vegetables. This is because the body borrows calcium from the bones in order to balance pH. *American Journal of Clinical Nutrition*

The message is clear: to improve bone health we need to maintain a healthy acid/alkaline balance by limiting acid ash foods, the worst of which is sugar and sugar-forming foods like starches. And ensuring we are eating a good supply of protein which can contribute to bone health. Currently osteoporosis and related problems have become the third leading health issue and expense. It makes sense to attempt to balance the underlying causes of this condition naturally. Bones remodel according to stresses placed upon them; this is called Wolf's Law and dictates that we should do weight-bearing exercise to promote healthy bone growth. If we consider the principles of pH and bone health and align our lifestyle accordingly osteoporosis no longer needs to be so devastating for so many people.

Test pH at about the same time each day

Normal Ranges: Urine = 6.75 - 7.25; Saliva = 7.0 - 7.5

Testing Urine: Quickly pass the strip in the urine stream, shake off excess, wait 15 seconds and asses with color chart. **Testing Saliva:** Gather saliva in your mouth and swallow; moisten tongue and hold strip with the colors against your tongue for 3 seconds; take it out; wait 15 seconds and then asses with the color chart.

pH strips: \$19.95/100; scientific grade pH strips selected for reliability and ease of use.

To have a custom program created for you or for a free consult call 508 583-2565

To view this and other health tips go to www.baritzwellness.com and select the Health Tips tab

Statements have not been evaluated by the FDA. *Baritz Wellness Center* products & services are not intended to diagnose, treat, cure or prevent any disease. Products and services are intended to support the normal physiological and biochemical process of the human body. Information is provided for educational purposes only and not as prescriptive advice. No guarantee or assurance of any specific result is given or implied. *Baritz Wellness Center* recommends that you consult with a medical doctor before starting, stopping, increasing or decreasing prescription medication. *Baritz Wellness Center* and *Standard Process, Inc** are unaffiliated and mutually disclaim any responsibility for each other's statements or literature. Copyright © 2011 Robert Baritz. All Rights Reserved. Page 1



450 Pleasant Street, Brockton, MA 02301 • 508 583-2565 • www.baritzchiro.com

Day of month	Urinary pH (6.75 – 7.25)		Saliva pH (7.0 – 7.5)		Quantity of sleep	Foods eaten the day before		
	1 st in AM	PM	AM	PM				
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								
31								
	L	<u> </u>						

Statements have not been evaluated by the FDA. *Baritz Wellness Center* products & services are not intended to diagnose, treat, cure or prevent any disease. Products and services are intended to support the normal physiological and biochemical process of the human body. Information is provided for educational purposes only and not as prescriptive advice. No guarantee or assurance of any specific result is given or implied. *Baritz Wellness Center* recommends that you consult with a medical doctor before starting, stopping, increasing or decreasing prescription medication. *Baritz Wellness Center* and *Standard Process, Inc** are unaffiliated and mutually disclaim any responsibility for each other's statements or literature. Copyright © 2011 Robert Baritz. All Rights Reserved. Page 2

Baritz Wellness Center, P.C.

450 Pleasant Street, Brockton, MA 02301 • 508 583-2565 • www.baritzchiro.com

		Low Alkaline	Lowest Alkaline	Food Category	Lowest Acid	Low Acid	More Acid	Most Acid
Baking Soda Sp	pices/Cinnamon	Herbs (most)	Sulfite	Spices/Herbs	Curry	Vanilla	Nutmeg	Pudding/Jam/Jelly
Table salt (NaCl) Se	ea salt	Green or Mu Tea	Ginger tea	Preservatives	MSG	Benzoate	Aspartame	Yeast/Hops/Malt
Mineral water Ku	Lumbacha	Rice syrup	Sucanat	Beverages	Kona coffee	Black tea/Alcohol	Coffee	Sugar/Cocoa
M		Apple cider vinegar	Umeboshi	Sweeteners	Honey/Maple syrup	Balsamic Vinegar	Saccharine	White/Acetic vinegar
Sc	oy sauce			Vinegar	Rice vinegar			
Umeboshi plums		Sake	Algae	Therapeutics	-	Antihistamines	Psychotropics	Antibiotics
			Ghee	Processed Dairy	Cream, cow	Cow milk	Casein	Processed cheese
			Human milk	Cow/Human	Yogurt, cow	Aged cheese	30-day cheeses	Ice cream
				Soy	Goat/Sheep cheese	Soy cheese	Soy milk	
				Goat/Sheep		Goat milk		
		Quail eggs	Duck eggs	Eggs	Chicken eggs	Lamb/Mutton	Pork/Veal	Beef/flesh
				Meat	Gelatin/organs	Turkey	Crustaceans	Lobster
				Game	Venison	Shell fish		
				Fish/Shellfish	Fish			
				Fowl	Wild Duck	Goose	Chicken	Pheasant
			Oats	Grains	Triticale	Buckwheat	Maize	Barley
			'Grain coffee'	Cereal	Millet	Wheat	Barley grots	•
			Quinoa	Grass	Kasha	Spelt/Teff	Corn	
			Wild rice		Amaranth	Farina/Semolina	Rye	
					Brown rice	White rice	Oat bran	
Wakame Po	oppy seed	Primrose oil	Avocado oil	Nuts	Pumpkin Seed oil	Almonds oil	Pistachio seed	Cottonseed meal
		Sesame seed	Linseed oil	Seeds/Sprouts	Grape seed oil	Sesame oil	Chestnut oil	Hazelnuts
Burdock/Lotus root Pe	epper/Taro	Cod liver oil	Coconut oil	Oils	Sunflower oil	Safflower oil	Lard	Walnuts
		Almonds/Ginseng	Olive oil	Roots	Pine nuts	Tapioca	Pecans	Brazil nuts
		Sprouts	Seeds (most)		Canola oil	Seitan	Palm kernel oil	Fried foods
Lentils Ko	Ohlrabi	Potato/Bell pepper	Brussels sprout	Beans	Spinach	Tofu	Green pea	Soybean
Yam Pa		Mushroom/Fungi	Beet	Vegetables	Fava beans	Pinto beans	Peanut	Carob
Onion Ga	arlic	Cauliflower	Chive/Cilantro	Legume	Kidney beans	White beans	Snow pea	
Daikon Ka	Cale/Parsley	Rutabaga	Okra	Pulses	String/ wax beans	Navy/red beans	Legumes	
Seaweed En	ndive	Eggplant	Turnip greens		Chutney	Adzuki beans	Carrots	
sea veggies M		Pumpkin	Squashes		Rhubarb	Lima beans	Chick pea	
Sweet potato/Yam Br	roccoli	Collard green	Lettuces			Chard	_	
Lime Gr	Frapefruit	Lemon	Orange	Citrus Fruits	Guava	Plum	Cranberry	
		Pear/Avocado	Apricot	Fruits	Pickled fruit	Prune	Pomegranate	
		Pineapple juice	Banana		Pineapple(dry)	Tomatoes		
		Apple	Blueberry		Figs			
		Blackberry	Currant		Persimmon juice			
		Cherry	Raisin		Cherimoya			
I		Peach	Grape		Dates			
		Papaya	Strawberry					

Statements have not been evaluated by the FDA. *Baritz Wellness Center* products & services are not intended to diagnose, treat, cure or prevent any disease. Products and services are intended to support the normal physiological and biochemical process of the human body. Information is provided for educational purposes only and not as prescriptive advice. No guarantee or assurance of any specific result is given or implied. *Baritz Wellness Center* recommends that you consult with a medical doctor before starting, stopping, increasing prescription medication. *Baritz Wellness Center* and *Standard Process, Inc** are unaffiliated and mutually disclaim any responsibility for each other's statements or literature. Copyright © 2011 Robert Baritz. All Rights Reserved. Page 3