NUTRITION QUIZ

1. Name 2 of the 3 most commonly used oils when listed as "vegetable oil" on labels.

2. Choose the one with the most unsaturated fat: butter, margarine, lard.

3. Which product has the lowest level of saturated fat: CoffeeMate, Cremora, Dream Whip, D'Zerta Whipped Topping or heavy whipping cream?

4. Why is flour bleached?

5. After 22 essential elements are removed from wheat flour during milling, how many are replaced so that it can be labeled "enriched"?

6. How many additives can be put into bread without having to be listed on the label because of the FDA's "standard of identity" policy?

7. Know your calories. Which of the following contains the most calories; which the least? 1 slice bread, 1 medium baked potato, 1 cup raisins, 1 cup unbuttered popcorn, 4 lb. hamburger, 1 egg

8. On the average, how much protein do Americans consume daily in comparison to their body's requirements?

9. Which vitamins are water soluble?

10. Which of the following contains the most vitamin C? 1 stalk broccoli,
8 brussel sprouts, 1 medium-sized boiled potato, 1 c. orange juice,
1 medium green pepper

11. What is nature's most nearly-complete food?

12. From whet source does your body derive most of its cholesterol?

13. Which of the following is not a salt additive? sodium chloride, x MSG, baking powder, polysorbate, baking soda

14. Why are BHA and BHT used in food products?

15. The RDA (Recommended Daily Allowances) are established by a committee appointed by whom.

16. Which of the following 2 columns of facts describes cocaine?

1	2
a highly refined, white crystalline powder	a highly refined, white crystalline powder
the chemical formula is C17H21NO4	the chemical formula is C12H22O11
is derived from a plant source	is derived from a plant source
is a powerful chemical substance producing strong physical and emotional effects	is a powerful chemical substance producing strong physical and emotional effects
produces psychological dependence but not true addiction	produces psychological dependence but not true addiction
is not associated medically with any serious disease	is implicated in heart disease, obesity, diabetes, kidney disease, tooth decay, and blindness
importing this substance in a refined state into the U.S. is a federal offense	importing this substance in a refined state into the U.S. is a federal offense

17. What substance is described by the other column?

NUTRITION

Many of the food and nutrition truths of yesterday, which most of us were raised with are no longer a satisfactory basis on which today's grocery shopper, menu planner, and cook can rely. To survive economically and nutritionally today, we all need to re-educate ourselves as to what our food is, where it comes from, and what has happened to it on the way from farm to supermarket.

The classic example of the adulteration of today's food is breakfast cereal. Cereal was at one time, simply whole grains (wheat, oats, bulgur, rice, etc.) cooked in liquid, providing a satisfying dish rich in protein, vitamins and fiber. Today, although the whole grains are still available, processed dry cereals are the most common breakfast fare in this country.

If the box of cereal costs you one dollar (and few are that cheap these days), 33 cents of your money goes to pay the high cost of advertising--which is required to sell a virtually nutrition less product. You also pay for the box, and the cost of the box is greater than that of the cereal it contains. You pay for the cutting, puffing and other shaping of the grain--the purpose of which is to make one brand of cereal appear different from another when actually it isn't. Part of your money pays for artificial coloring, artificial flavor, chemical preservatives, and sugar. None of these adds nutritive value. You pay, too, for synthetic vitamins which have been added to restore some of the nutritive value destroyed by processing. The least part of your dollar pays for the grain.

The absurd fact that dry, boxed cereal now far outsells the natural grain, (which only takes a few minutes to prepare) in spite of the fact that ounce for ounce the cooked whole grain is cheaper and more nutritious, is merely one example of why all of us need some reeducation on foods--and whether or not what we're getting is providing us with sound nutrition and sound economy.

Let's first of all check your nutrition I.Q. Perhaps you've already begun your re-education process. Certainly much publicity is being given to the fallacies that exist in the U.S. food system. A. short quiz will be passed out on which you can write your answers. Then, as the answers are given, information will be supplied that, hopefully, will help you and your family to gain both nutritionally and economically.

ANSWERS TO QUIZ

1. Coconut, palm and cottonseed. Did you get 2 of them? Coconut and palm oil are both highly saturated, low grade oils that, unfortunately for the American consumer, are cheap. They are, therefore, extensively used by food processors. These oils are also subjected to microbic fermentation in shipment. Cottonseed oil is also used under the "vegetable oil" listing. Since cotton is not a food, the pesticides used by cotton growers are not regulated by the same laws that govern food production, but the pesticide residue may be transmuted to the oil.

2. Would you believe it could be lard? Lard contains 33% saturated fat. Margarine, depending on the brand, contains from 18 to 40% saturated fat, and butter has 46% saturated fat. In choosing a spread, do not be misled by labels and advertising that claim their product is made from polyunsaturated oils. The key word is "from". The process of hardening an oil, hydrogenation, is a chemical process that adds hydrogen atoms to carbon atoms, thus producing a saturated fat. All hard margarines contain saturated fats. Oil can be truly polyunsaturated or monosaturated, depending on its derivation. Butter is a natural product, made from milk in a simple process. Butter is probably the safest saturated fat to use, but not the cheapest. If you buy it labeled "sweet cream, unsalted", you can be sure of a carefully handled, pure product. Salt covers up a multitude of sins and processors love to use it freely. The hydrogenation process necessary for making margarine leaves up to 50 parts per million nickel catalyst in the product- which you don't need. Also the residue nickel in turn causes oxidation, which shortens shelf life, and the processor doesn't want that. So he adds BHT --and you don't need that either. By the way, if you're buying a peanut butter that doesn't require stirring, it has been hydrogenated.

3. Heavy whipping cream has the lowest level of fat at 16.2'! Coffee Mate has 21.7%, Cremora 25.5, Dream Whip 26.6, D'Zerta Whipped Topping has 40.91. In fact, of CoffeeMate, Cremora, Pream, Coffee Rich, Dream Whip, Lucky Whip, D'Zerta, Cool Whip and Rich Whip, only Coffee Rich and Rich Whip contain less fat than real cream. Imitation cream is a concoction of factory-made chemical substances which all include fat--often either coconut or palm oil, which are the lowest grade of all oils and highly-saturated. That's not the only surprise in whipped toppings. Do you know what the largest percentage of Cool Whip is? Water

4. White is beautiful. White, since the days of Roman civilization has been associated with goodness, purity and nobility. White flour, therefore, became a

symbol of refinement, a high standard of living, and snob appeal. Millers found that by storing flour for a few months it became whiter and had improved baking qualities. This practice was used till about 1900 when millers discovered that these same effects could be achieved instantly by blowing chlorine gas into the flour. This technique saves much storage space and turns the product over quickly. The problem lies in the fact that the chlorine gas not only bleaches and matures the flour; it also changes the molecular structure of the flour and much of the unnatural (to flour) chlorine lipids remain. The chlorine dioxide also destroys the major portion of vitamin E present in the flour. Bleached flour is banned in both Germany and Japan. Only bleached flour allows the baking of high-ratio-cakes (more sugar than flour), so overly-sweet cakes are not available in either country.

5. Four. Home economists that one hears on Phil Donohue and other talk shows who pooh-pooh all the warnings against consuming on a regular basis bread products labeled "enriched", usually use the argument that even though the natural vitamins have been removed through processing, they are restored by the addition of synthetic vitamins.

It is true that synthetic vitamins are added, but 22 are removed, 4 are replaced. And, of course, all the fiber content (bran) is removed and none replaced. Most of the home economists making the talk show rounds are employed by large food processors.

6. To make a wise selection at the bread counter is nearly impossible. The reason? Because bread is a Standard of Identity product. This means that the FDA has a list of, in this case, over 100 additives which the manufacturer can put in his bread and never have to list on the label. To add to the mystery the manufacturer can also list only the items he chooses, so even when you are selecting bread by careful label reading, you do not necessarily know what you are getting. Ice cream, jams and mayonnaise are also Standard of Identity products.

Note: If you're looking for whole wheat bread, be sure the label says <u>whole wheat</u>. Mrs. Baird's, for instance, packages brown colored bread called "wheat". This is made with bleached flour to which caramel coloring is added.

7. You probably got the one with the most calories. Hamburger at 300. But did you get the one with the least? Popcorn at 40. The raisins are 240, potato, 90, bread 65, egg, 60. One nutrition fallacy in the minds of most Americans is that carbohydrates are fattening. Carbohydrates are complex sugars and they contain calories, but protein rich foods usually contain more calories per gram than

carbohydrates. Carbohydrates also contain other valuable nutrients. If you reduce your carbohydrate intake significantly, you will most likely get inadequate amounts of iron, calcium, B vitamins, vitamin A, vitamin C and other trace elements. You can pick up most of these nutrients by consuming more meat and dairy products, but then you will also increase your fat consumption--and your caloric intake. Carbohydrates have gotten bad press. They're actually a boon to the dieter. Just keep the spread off the bread!

8. The average American daily consumes 4 times the amount of protein her body requires. A woman weighing 128 pounds needs 46 grams of protein a day. To give you an idea of how easily satisfied this requirement is: if you ate a small glass of orange juice, an egg and a glass of skim milk for breakfast, a lettuce salad with carrot, tomato and no dressing, plus a whole wheat roll without butter for lunch, all you would need for supper to satisfy your daily protein requirement would be a serving of sweet peas and a glass of skim milk. Americans over eat protein, which adds calories to our diet and expense to our budget. Why? Because food processors score high on salesmanship. They make a high rate of return on protein, so they have poured millions and millions of dollars into advertising to make us believe we are very likely to not get enough protein. Even the extremely low income family consumes a daily average of 12 times their need of protein. It's hard to not get enough protein.

9. The answer is all the B's and C. It is important to know because they need to be replaced daily. Also A, D, E, and K are fat soluble and are stored in the body, so you shouldn't take supplements as they could reach toxic levels.

10. One stalk of broccoli provides 160 mg. of vitamin C; 8 brussel sprouts provide 140 mg of C; 1 c. of orange juice 120 mg; 1 medium green pepper, 70 mg; 1 medium boiled potato, 22 mg.

11. No, it is not milk, contrary to what the American Dairy Association would like us to believe. Milk has little vitamin B and no C. A and D are added by the processor. Nature's most nearly complete food is the egg. It is a balanced source of all important vitamins (except C) and minerals, plus contains 8 grams of protein.

12. Your own body produces 3 times the cholesterol (1000 mg) you could possible consume in your daily diet (300). Much new evidence on cholesterol is being brought in. Among the findings are that the body appears to excrete excess cholesterol. If you eat less, your body will manufacture more to meet your required

level. And 80% of all heart attack victims do not have elevated cholesterol levels. Did you know that cholesterol is a waxy, alcoholic substance?

13. I bet nine out of ten of you got this one. Polysorbate is an emulsifier. (It is used to soften bread so the manufacturer can use less of the more expensive natural softening agents like oil, milk and eggs. It also increases shelf life. It is banned in Great Britain, France, Germany and Japan.) All of the others are salt additives and you will find one or more of them in almost everything. Processors love salt as it covers up a myriad of product faults--inferior quality, poor handling, over-extended shelving, etc. Salt is added to nearly every product that passes through the processor's hands. If you are trying to cut back on salt, and most of us should, start reading labels and watch for sodium, the offending part of salt. Even plain frozen vegetables without sauces often contain salt, sometimes sugar, too. Bouillon cubes and powder are almost 100% salt.

14. BHA and BHT are short for butylated hydroxyanisole and butylated hydroxytoluene (you can see why they're abbreviated!) both are anti-oxidants. BHT has been under question since 1959, when it produced birth defects during laboratory studies. It has been removed from the FDA's GRAS list (Generally Recognized As Safe), but it has never been banned in the U.S. It is banned in Great Britain. Although the verdict is still out on the safety of BHT, often you will find 2 items side by side on a grocery shelf, one in which the processor has used BHT, the other processor has not. You might as well consume the product without. You also will gain the advantage that the product without BHT has probably made a much quicker trip from factory to supermarket, since the processor hasn't insured 2 year's worth of freshness by adding BHT.

15. The U.S. Recommended Daily Allowances are established by a committee called the Food and Nutrition Board of the National Academy of Sciences National Research Council, which is a private business organized by food processors and vitamin manufacturers. Most people assume the RDA's are set by an arm of the government. Not so. They are set by a committee whose salaries are paid by firms such as General Foods, Kellogg, and Upjohn. The U.S. RDA's are substantially higher than those set by the World Health Organization, whose staff is not salaried by food and drug manufacturers.

16. Column #1 describes cocaine.

17. The other column describes sugar.

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There are so many books available on this topic and I've read countless numbers of them to the point that I have no idea where much of my general information has been garnered from. However, any specific facts I've used today have been taken from the books cited in this bibliography.

Carol Dieterichs (Mrs. Gary) – Chapter FQ