

# Temporary Diet Guidelines For an Undiagnosed Fatty Acid Oxidation Defect



## Introduction:

In almost every cell of your body are powerhouses called *mitochondria*. They take fat into them and produce energy for daily activities. If fat can't get into the mitochondria then your body can't make energy at certain times, like when your body is very active metabolically.

**Here are some symptoms you might have when your body isn't getting enough fuel/energy:**

- Muscle pain and stiffness
- Dark cola coloured or reddish urine
- Rhabdomyolysis (muscles are broken down and the waste products float in blood which stresses kidneys)

**Your condition can be worsened when you:**

- Exercise vigorously
- Fast (don't eat)
- Experience extreme temperatures (hot climates)
- Get a viral infections (colds/flu/fever)
- Need anesthetic for surgery
- Don't get enough sleep
- Eat a very high fat diet (less common)



## **Helpful Ways to Eat for Energy**

- ☑ Eat plenty of carbohydrates (they become glucose which your cells can easily use for energy) to prevent the fat breakdown system from kicking in
- ☑ Eat frequently so you always have some "energy" around. Don't go for longer than 2-3 hours without having a meal or snack.
- ☑ Limit fatty foods (they are made of long chains of fat which can't get into the mitochondria very easily)



## More Diet Details

### 1. Eat 6 times a day

- choose carbohydrate rich foods
- munch on nutritious snacks between meals such as:
  - a yogurt shake (recipe below) (63 g carb, 0 fat)
  - cantaloupe wedge+thin slice proscuitto (26 g carb, 3 g fat)
  - honey on 2 slices of whole wheat bread and  
sprinkle with cinnamon (37 g carb, 0 fat)
  - 1/2 banana sliced+1/4c grapes (frozen) (19 g carb, 0 fat)
  - a chewy bagel--any flavour but cheese (45 g carb, 1 g fat)
  - leftover low fat chili on a baked potato (43 g carb, 6 g fat)

### 2. Drink plenty of water (especially when exercising).

- Staying hydrated helps muscle cells work better
- carry a water bottle with you all day
  - make frequent trips to the water cooler
  - if you don't like to drink water try:
    - herb tea, iced tea, clear soups, Popsicle, Jell-O, watermelon,  
oranges, non-cola soft drinks
  - flavour water with lemon and orange slices
  - try Gatorade or sports drinks

### 3. Limit the fat in your diet

- avoid deep-fried foods like fish and chips and french fries
- try light, low fat and ultra low fat products like mayonnaise and salad dressing
- limit eggs to 3/week (egg yolk has 5 g fat). Try Egg Beaters
- limit visible fats like margarine, butter, mayonnaise, salad dressing, oil, gravy, sour cream to 3-4 tsp daily
- trim the fat from meats
- remove chicken skin before cooking
- cook meat so the fat drips out (grill on rack, BBQ, rotisserie)
- avoid foods high in hidden fat like croissants, donuts, regular

cheddar cheese, crackers (bacon dippers, cheese Ritz), cream soup

#### 4. Eat plenty of complex carbohydrates at each meal

Carb per 1/2 cup (unless otherwise noted)

Lentils	20 g	brown beans	26g
whole wheat bread (1)	13	brown rice	23
couscous	18	stoned ground crackers (3)	8
graham crackers (3)	16	fruit cup	16
vegetables	12	chick peas	27
V-8 juice	6g	oatmeal	13g
All-bran cereal	24	pasta	20
Corn	17	potatoes	16
muffins (low fat)	23	cereal bars (low fat)	26
fruit yogurt (low fat)	32	bagel	39

#### 5. Eat a snack before exercising and during prolonged exercise

Try: A piece of fruit

Crackers and low fat cheese/low fat cream cheese

Graham crackers and a glass skim milk

A Fruit/Vegetable Bar (e.g. Sunrype)

Pretzels

Low fat granola bar or cereal bar

A handful of your favorite dry cereal

Low fat yogurt

Low fat muffin

A piece of whole wheat toast with jam/honey

#### 6. Get your vitamins

-vitamin C found in kiwi, strawberries, cabbage, oranges, grapefruit and enriched apple juice may protect muscles from damage during exercise

-vitamin E found in wheat germ, olive oil, bran cereal and whole wheat bread can also protect muscles cells.

-your doctor may prescribe other vitamins for you which will help you to get more energy ie riboflavin, thiamin, carnitine

## **7. Browse the internet and learn more about your condition**

- Using yahoo search engine type in "fatty acid oxidation"
- You will get a site "fatty acid oxidation disorder (FOD)"--double click on this and you will go to the main page of FOD
- enter then click on support resources

## **8. What to do if you get sick**

- it's important to give your body fuel in the form of carbohydrate so try to ***drink something every half to one hour:***
  - sips of diluted juice, gingerale, broth, tea with sugar, flat pop, Gatorade, Jell-O, Popsicles, frozen juice cubes.
- if you can't keep anything down you should call your doctor.