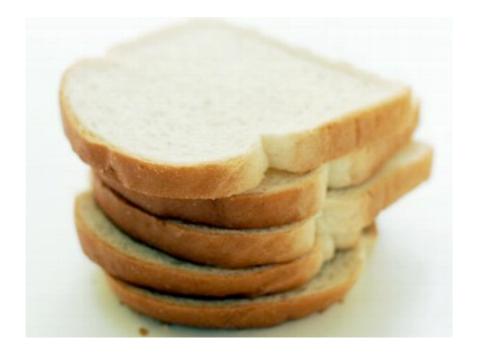
Low Residue Diet



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Nutr 340

5/16/2011

Low Residue

Low residue diets are diets aimed at consuming minimal amounts of "residue" foods to reduce the amount of stool that a person produces. "Residue" foods are any food that stimulates a bowel movement (CNN). According to the Mayo Clinic, the purpose of a low residue diet is to reduce the frequency and volume of stool for those recovering from abdominal surgery or digestive problems, specifically diverticulitis and Irritable Bowel Disease (Mayo). Low Residue Diets very closely resemble Low Fiber Diets in that fiber intake is reduced to an absolute minimum, however, Low Residue Diets also limit other foods that encourage bowel movements (CNN). For the purpose of this dietary experiment I chose to follow the Mayo Clinic's guidelines for a Low Residue Diet.

Low Residue foods include refined breads, cereals and other grain products that contain <1g per serving of fiber (zero grams is preferred), white rice, juices without seeds or pulp, meat, poultry, fish, eggs, oils, butter, strained broth based soups and dairy products, jellies, honeys and syrups (Mayo). The dairy must not be consumed in amounts over two cups per day, because dairy is considered to be a bowel stimulant. Medline Plus also includes raw vegetables such as onions, cucumbers, lettuce and zucchini as well as canned vegetables that do not have seeds. They also specify certain fruit that may be eaten raw.

The Low Residue Diet excludes foods containing whole grains, whole vegetables, whole fruits (includes canned), anything containing pieces of fruit (yogurt, ice cream,

soups), peanut butter, seeds and nuts, and preserves with seeds or fiber such as marmalade (Mayo). Medline Plus also adds that spicy foods should not be consumed, also chocolate made with cocoa powder, caffeine and lunch meats.

A low residue diet lacks many essential nutrients and almost all sources advise that if you follow this diet for an extended period of time, a Registered Dietitian should closely monitor the diet. Medline Plus adds that some people may have to remain on a Low Residue Diet for the rest of their lives; however, their description of a low residue diet is a little more lenient than the Mayo Clinics description.

Given the restrictions, Low Residue diets cause you to under consume entire food groups. There are no fruits, vegetables or whole grains and dairy products are also limited. Also, because so many food groups are either cut out or limited by a Low Residue diet, other food groups like refined carbohydrates and proteins are increased.

Because I was consuming the Low Residue Diet under the idea that it was helping me recover from either abdominal surgery or a digestive issue, I avoided eating larger portions of meat. My reasoning was that if I were seriously ill, complex proteins would be difficult for my GI Tract to handle. Consequently, my diet was just over 65% carbohydrates. My macronutrient break down was 14% protein, 66% carbohydrate and 20% fat. A computer diet analysis using Food Processor (ESHA Salem, OR) revealed that I over consumed calories, protein and carbohydrates while under consuming fat. The vitamin and mineral values for my diet are slightly skewed because I took a multivitamin.

While following my Low Residue Diet I consumed around 2500kcals per day.

This is about 500kcals higher than I usually consume. This fact is interesting because

most of the foods I consumed were very high energy dense foods (more kcals/kg) for example processed macaroni and cheese, pop-tarts, and white breads with lots of butter. These foods were some of the only carbohydrates and "on-the-go" options I could find with limited fiber content. I figured that if I was actually recovering from a surgery or digestive problems, cooking would be reduced to a minimum as well; hence, the high energy dense processed convenience foods. High energy dense foods usually contain more calories but produce low levels of satiety (Rolls). This would explain why I consumed more calories but never felt completely full. I did, however, start to lose my appetite after a few days, but that was because I was tired of feeling like my stomach was full of bread dough or unhealthy foods.

Overall, I felt like the diet was completely unhealthy for an active person's body. After trying to go for a swim and almost passing out in the pool, I realized that my body was seriously lacking major nutrients. I had obviously been consuming enough carbohydrates to fuel my body throughout a work out, but it was clear I was not healthy enough to continue exercising. As the week went on, I found myself constantly getting dizzy, nauseous, and lightheaded. I felt constantly dehydrated, which was most likely due to the lack of dietary water from fruits and vegetables and an increase in sodium from processed foods. I drank more water than usual to try and replace my dietary intake, but I never actually felt hydrated. Now, even days after ending the diet, I still feel dizzy sometimes and my bowel movements have not returned to normal.

I believe that this diet, although important for decreasing the volume and frequency of stool, is very unhealthy. I feel that if I were seriously ill and on this diet, the combined effects would be worse than the illness itself. I do see the importance of

limiting stool for a few days in the case of surgery or digestive issues; however, the diet left me feeling completely unhealthy, so it seems they would be trading GI relief for nausea, dizzy spells and episodes of light headedness.

I think, similarly to my case, that most clients would not know how to handle a low reside diet. Most online information was very limited. It did not include numbers for fiber consumption other than that you should strive to consume 0g per serving in foods. I think the client would turn to simple convenience foods if they were returning to their normal lives and consume a diet similar to what I took in. They would not enjoy eating, would completely under consume major nutrients, and still would not feel healthy.

According to the American Dietetic Association, the goals for Americans on Fiber intake are 25g/day for 2000kcal diets and 30g/day for 2500kcal diets (ADA). While following the low residue diet, I consumed only around 11g/day of fiber while maintaining a diet of ~2500kcals. If I had in fact been recovering from abdominal surgery or digestive problems, the diet might have been effective, however, because during the diet I was a normal functioning, moderately active person, this diet took a large toll on my body. After the swimming incident, I decided not to exercise until the diet was over.

I had very minimal weight changes. Before I started the diet I weighed 103lb and after the diet I weighed 102lb. The weight change was so small it could have been explained by a difference in the amount of food in my stomach, how hydrated I was or any number of small things. It also makes sense that my weight did not change because although I was taking in more calories than usual, I was losing water weight by becoming

more and more dehydrated. I also was only on the diet for 5 days, so it makes sense that after returning to my normal diet in such a short period of time, my weight was normal. As a side note to losing weight, my bowel movements were very irregular and often urgent during this process. The colors were an interesting surprise as well and I actually found an article by the Mayo Clinic on stool color and what it indicates about your diet: http://www.mayoclinic.com/health/stool-color/AN00772.

I also found that a Low Residue Diet is not that far off from some college students' diets. I often see students eating convenience foods that do not contain a lot of fiber. Some also do not consume many fruits or vegetables. The Low Residue Diet is very economical because you are not purchasing fruit, vegetables, or whole grains. You can easily follow the rules by consuming rice, convenience pastas, eggs, cheap meats like chicken etc. Although the diet does put some restraints on social eating, there are many facilities that offer meat with rice or bread and butter on the menu. All of these factors make a Low Residue Diet closely resemble some typical college students' diets.

Overall I found the Low Residue Diet experience to be really interesting. I am a big fan of trying new ways of eating, challenging myself, and also just putting myself in my future clients shoes. This was a very useful tool for understanding how clients think and act. It was interesting to see what the body goes through under the conditions of a Low Residue Diet and to see what solutions you come to when dealing with those changes. Through this diet experiment I have learned a great deal about how people think and act when their eating habits are disturbed. I understand that eating can become a very stressful activity and lead to major mood swings and differences in your ability to work and concentrate.

Works Cited

- "Foods to enjoy when eating a low-residue diet." *Hamilton Health Sciences Patient Education*. Hamilton Health Sciences, 30 Sept. 2010. Web. 20 May 2011.

 http://www.hamiltonhealthsciences.ca/documents/Patient%20Education/LowResidueDietFoods-trh.pdf.
- Mannheim, Jennifer, and George Longstreth. "Low-residue fiber Diet." *Medline Plus Medical Encyclopedia*. Medline Plus, 11 Nov. 2010. Web. 20 May 2011. http://www.nlm.nih.gov/medlineplus/ency/patientinstructions/000200.htm.
- Mayo Clinic Staff, . "Low-residue Diet." *Mayo Clinic*. Mayo Clinic, 15 Aug. 2009. Web. 20 May 2011. http://www.mayoclinic.com/health/low-residue-diet/my00745.
- Picco, Michael. "Stool Color: When to Worry." *Mayo Clinic*. Mayo Clinic, 13 May 2010. Web. 20 May 2011. http://www.mayoclinic.com/health/stool-color/AN00772.
- Rolls, Barbara. "Energy Density and Nutrition in Weight Control Management."

 The Permanente Journal 7.2 (2003): Web. 20 May 2011.

 http://xnet.kp.org/permanente journal/spring03/energy.html>.
- "Special diets for special needs: Clear liquid, low fiber and low residue." *CNN*. Mayo Clinic, 11 Aug. 2005. Web. 20 May 2011.

 http://www.cnn.com/HEALTH/library/AN/01136.html.

Daily Food Journal

Monday 5/9

7:30 AM Ritz Crackers (7)

9:00AM Bagel and (.75 oz) cream cheese

11:00AM White Rice (1 cup) and Chicken Noodle Soup (Cambells ½ can), (8oz) Orange-Passion 100% Fruit juice (no pulp), (8oz) water

4:00PM I noticed my belly feels like jell-o, very bloated and squishy. My body is pretty sensitive to high Glycemic Index foods, so this should be a very interesting diet for me to follow.

5:00 PM French baguette and butter, (8oz) water

-I love butter, so I'm okay with this part of the diet. Looking forward to it a little.

5:15 PM Cereal and (4oz) 2% lactose free milk

-Feel sick to my stomach. Lots of processed/non complex CHO makes me feel sick usually, so I'm beginning to see how hard this diet is going to be for me.

7:00 PM (3 oz) Salmon and (1 cup) white rice, (4oz) Orange-Passion 100% Fruit Juice (no pulp), (8oz) water

- -Not used to drinking juice. I feel like I have too much sugar in my system, but I want the fruit. Also, almost grabbed broccoli served at dinner out of habit.
- -Trying to hold down food. Feel like vomiting

7:15PM multivitamin (no fiber), (11oz) water

-Don't feel like eating at all, drinking tons of water. Feel like most of my foods are very salty (fish, chicken noodle soup, butter, mac and cheese, chicken, mayo etc).

9:00PM (1 cup) plain yogurt with honey and sprinkle (1/8 tsp?) of cinnamon.

- -My stomach finally stopped hurting (very soon after consuming yogurt) and I stopped feeling nauseous.
- -Woke up twice during the night to urinate.

Tuesday 5/10

10:00-Poop! (small amount medium light tan color)

-http://www.mayoclinic.com/health/stool-color/AN00772 (an article I found on stool color and what it means about your diet).

10:30AM (1 cup) white rice+ 2 eggs, 1 (4 oz) Orange-Passion 100% Fruit Juice (no pulp)

-stomach feels fine after eating. Still very thirsty.

12:00PM (2) Pop-tart (cherry flavor <1g fiber per serving x2) (11oz) water

4:00PM(½ box) Macaroni and cheese, (3oz) salmon, (16oz) water x2

- -played volley ball for several hours, felt like I had normal energy/concentration levels.
- -Stomach feels bloated (still feels like jell-o belly)

7:00 (20z) French bread + (1tsp) butter, (1/2 box) Macaroni and cheese, (1/2 thigh) chicken, (4 oz) Orange-Passion 100% Fruit Juice (no pulp) (16oz) water x2

- -Only was able to eat ½ a piece of chicken, not feeling very good.
- -Once again, almost grabbed broccoli out of habit (my house eats a lot of broccoli).

11:00 – urgent Poop! (many small poo's, not held together well, orange/tan light color)

-http://www.mayoclinic.com/health/stool-color/AN00772 (stool color article-Mayo Clinic)

12:00AM – stomach is gurgling, not very hungry.

Wednesday 5/10

-semi hungry (woke up late and didn't get to prepare food)

9:00AM Cherry pop-tart x2

-feeling very light headed, low energy, MUST EAT! Tingling feeling around chest area.

12:00 PM Egg Salad sandwich (2 eggs, 1tbs mayo, two slices of potato bread) + (8oz) Orange-Passion 100% Fruit Juice (no pulp)

- -stomach gurgling really loud, urgent poop.
- -feeling hungry, low energy.

7:30PM chicken thigh, French bread + 1tsp butter, (4oz) ensure meal beverage.

- -feeling better but didn't eat much.
- stomach gurgling really loud, urgent poop (does not stick together, orange pale color).

12:00AM Chicken thigh, ½ cup cereal+ ½ cup milk

-tried to make top ramen but it had more fiber than I expected. Boiled the water and was all ready to go until I saw I had misread the lable. I found that the more instand meals like mac and cheese have low fiber noodles so I thought ramen would definitely be in the same category. Wrong \odot

Thursday 5/11

7:00AM (1) Chicken thigh, Half piece of buttermilk toast w/ seedless raspberry jam -not very hungry but know I should eat more.

10:30AM(1.5) cups white rice and two eggs, (1 sprinkle) rice sprinkles <1g Fiber / tbs

-this meal kept me full for a long time. Haven't been feeling hungry lately, I just know I should eat more.

4:00PM (4oz) Orange-Passion 100% Fruit Juice (no pulp), Grilled cheese sandwich (2 slices buttermilk bread, (2oz) cheddar cheese), 1 Cherry pop-tart

8:00PM (2 cups) White rice, 4 oz boiled chicken, (8 oz) water

-Fortunately, my friends keep making chicken and rice when I'm over at their houses, SO I CAN EAT TOO!

Friday 5/12

-dreamt of McDonalds last night...I dreamt that I ordered two items off of the dollar menu and when I got them, they were HUGE! I was so excited and couldn't believe it. Then I woke up and alas... no McDonalds. \odot I think one of my first meals back to regular food will be a big FAT Big Mac Meal. I want French fries and a sesame seed bun! And special sauce....

8:45 AM Cherry Pop-tarts x2

-I woke up without enough time to sit and eat breakfast so I just ate the "reserve" poptarts I kept in my backpack. Usually I just eat one at a time and have a little wait period in between, but this morning I ate both in a row. My GI tract instantly felt like it was being burned from all of the sugar and I felt like I was going to vomit.

12:00 (2 cups) Boiled macaroni noodles with (1 tsp) butter and (1tbs) parmesan cheese, 4 oz sardine canned fish.

- -macaroni noodles (from a box of mac and cheese) were the only low fiber noodles I could find.
- -I just leaned about inflammatory response and diet at the ODA conference. It has encouraged me to eat more fish (for omega-3 fish oils). I decided that if I was someone with IBS, diverticulosis or who had recently had GI track surgery, I should be eating fish oil for a healthy, quick recovery (the message of the speaker at ODA).

3:00 100% Fruit Juice, multivitamin

5:30 (1 ½ cups white rice), (1 oz) cheddar cheese, ¼ cup noodles w/ butter

-Feeling very weak and sick. I've decided that since I've eaten my last real meal, I will go ahead and start introducing foods back into my diet tonight. I've felt the effects of the diet and understand what consequences a diet without fiber has. I feel very dizzy and nauseous.