

# NutriFIT Wellness Center

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### Mission & Vision

Our mission is to create healthy meals for physically active, prediabetic clients who are committed to making a tremendous lifestyle change in hopes of living a healthier life. Our vision is to assist clients in adopting a healthy lifestyle including nutrient-dense cooking methods and effective physical activity. Clients will learn these self-sustaining skills so that they can prepare healthy meals and workout regularly on their own for their entire lifetime.

## Our Clients

Our clients are adult men and women (over age 21) who are concerned about possibly developing diabetes. Their concern may come from either an actual medical diagnosis of prediabetes, family history, their current diet, or their current weight. Our clients are all interested in making a complete lifestyle change which includes exercise and a healthy diet. We came up with our diet parameters based on the research we conducted. Some of the dietary guidelines that Asif (2014) had in his study on the prevention of type II diabetes are:

- Most of the carbohydrate consumed should be in the form of starch (polysaccharides) such as maize, rice, beans, bread, potatoes etc.
- All refined sugars such as glucose, sucrose, and their products (soft drinks, sweets, toffees, etc.) and honey should be avoided, except during severe illness or episodes of hypoglycemia. These foods contain simple sugar, which is easily absorbed causing rapid rise in blood sugar.
- Non-nutritive sweeteners, e.g., Canderel, saccharine, NutraSweet, aspartame are suitable sugar substitutes for diabetic subjects.
- Animal fat such as butter, lard, egg yolk, and other foods high in saturated fatty acids and cholesterol should be reduced to a minimum and be replaced with vegetable oils, particularly polyunsaturated fats.
- The items allowed for free consumption include: Water, green leafy vegetables, tomatoes, onions, cucumber, aubergine, peppers, vegetable salad without cream. Any brand of tea, coffee, or drinks that contain very low or no calories.
- Small meals spaced over the day, rather than 1 or 2 big meals, are helpful in avoiding post-prandial peaks in blood sugar.

Asif (2014) also noted that when overweight patients with diabetes lose some weight by reducing their serving sizes and therefore calories in general, their insulin sensitivity improves. We decided for our clients who are overweight that a deficit of 500 calories a day is a good approach for safe weight loss. We also designed all of our meals to be around the same amount of calories for each category (breakfast, lunch, dinner, and snacks). Another one of our main focuses was to increase fiber intake. Asif (2014) in his study stated that patients should aim for 40 grams of fiber per day. We increased our fiber intake by incorporating lots of fruits, vegetables, and whole grains. We recommend for our clients carbohydrates that contain a good amount of fiber (brown rice, whole wheat bread, whole wheat pasta) because the fiber will help them digest slower and minimize blood sugar spikes. The American Diabetes Association recommends a diet that includes mostly plant based protein or lean protein. We included in our plan a lot of meals containing beans, lentils, tofu, hummus, and chicken based on that information.

Menu - we need to keep this page in here so that the page numbers are correct. It does NOT need to be printed or included in the report!

### ESHA Analysis

	Recommended	Day 1	Day 2	Day 3	Day 4	Day 5	Average
<b>kcal</b>	2152	2154	2154	2149	2154	2152	2152
<b>Fiber (g)</b>	$\geq 14$	67	68	49	62	44	58
<b>Added sugar (g)</b>	$\leq 15$	0	0	0	0	0	0
<b>Total Fat (kcal)</b>		680	619	619	619	643	636
	$\leq 30\%$ total kcal	32%	29%	29%	29%	30%	30%
<b>Saturated Fat (kcal)</b>		84	157	108	131	149	126
	$< 10\%$ total kcal	4%	7%	5%	6%	7%	6%

Based off of the information we gathered from the American Diabetes Association and the study from Asif (2014), we set five basic parameters for the diet:

- Set a refined sugar limit to  $\leq 15\text{g}$
- Increase the fiber intake to  $\geq 14\text{g}$
- Choose healthier fats from plant sources, and avoid saturated fats
  - Total fat recommendation  $\leq 30\%$  total kcal
  - Total saturated fat recommendation  $< 10\%$  total kcal
- Have a calorie deficit on average of 500 kcal a day to promote weight loss
  - Caloric goal for Bob Smith: 2,152 kcal
- Have smaller meals, preferably about six a day to maintain glucose levels throughout the day, instead of having spikes after big meals (breakfast, snack, lunch, snack, dinner, healthy dessert options)

After a detailed ESHA analysis of the diet, all of the set parameters were met by the food options given. The average kcals for the week were 2,152, falling in line with the 2,152 kcal goal. Fiber came in at 56 grams, well over the set  $\geq 14\text{g}$ . Clearly, someone just starting out on the diet is going to have to slowly increase their fiber to that amount. Individual appointments will be made with new clients, to evaluate their current diets, and over a two - four week period, unhealthy foods will be decreased while more foods from the program are used to make sure that the client has time and is able to adjust to the new diet. There was no added sugar within any of the prepared foods for the diet, falling well below the  $\leq 15\text{g}$ . The total fat goal of  $\leq 30\%$  total kcal was met individually on all days but one, but the average percent fell within the parameters. Average saturated fat fell at 6%, well below the  $< 10\%$  total kcal goal, with the highest individual day coming in at 8%. The menu was set up so that clients could choose from a variety of options to make sure that they were having smaller meals throughout the day. Overall, the program and diet detailed out above met all parameters set.

## References

- Asif, M. (2014). The prevention and control the type-2 diabetes by changing lifestyle and dietary pattern. *J Educ Health Promot.* Published online 2014 Feb 21. doi: [10.4103/2277-9531.127541](https://doi.org/10.4103/2277-9531.127541)
- Making healthy food choices.* American Diabetes Association. Retrieved from <http://www.diabetes.org/food-and-fitness/food/what-can-i-eat/making-healthy-food-choices/?loc=ff-slabnav>

## Appendix



