## GLUTEN FREE DIET IN CELIAC DISEASE

## A Guide For Patients/Families



## Department of Nutrition and Food Services

Q: What is celiac disease?
Ans: Celiac disease, also called celiac sprue, is a digestive disease that damages the small intestine and interferes with the absorption of nutrients from food. People who have celiac disease cannot tolerate gluten, a protein found in wheat, rye, oats and barley; it is also found in some medicines and vitamins.

Q: What are the symptoms of celiac disease?
Ans: This disease may present with a broad range of symptoms and severities.

Common symptoms are:

- Weight loss
- Lethargy, weakness
- Diarrhea (loose stools)
- Anemia (low hemoglobin)
- Stomach pain
- Skin rash (dermatitis herpetiformis)
- Mouth ulcers
- Weak bones (osteomalacia)
- Joints pain
- Menstrual irregularities
- Malnutrition

Q: How common is celiac disease?
Ans: Celiac disease affects people of all age groups across the globe. It affects both male and female. The exact burden of celiac disease in Pakistan is not known but international figures showed that 1 in 33 people are affected by this disease.

Q: Do patients with celiac disease have other health problems? Ans: Yes. Celiac disease patients are at risk of having other autoimmune diseases like:

1. Diabetes (type 1 )
2. Thyroid disease
3. Liver disease (autoimmune)
4. Addison's disease (a condition in which the glands that produce critical hormones are damaged)
5. Joint disease

## Q: How celiac disease diagnosed?

Ans: Celiac disease has long been under diagnosed; it is confused with other conditions like intestinal infection.
Correct diagnosis is usually based upon symptoms, blood tests and biopsy taken of small intestine during endoscopy.

## Q: How celiac disease is treated?

Ans: The only treatment for celiac disease is to live a gluten free diet.

Dieticians can help patients choose foods which are free of gluten. Following this diet will stop symptoms, heal existing intestinal damage and prevent further damage. Eating even small amount of gluten can damage the small intestine. Hidden sources of gluten in preservatives and medicines need to be identified.

## Q: How can I simplify my diet, as it seems difficult to avoid foods containing gluten?

Ans: It is simple, given below is the table which will provide list of food that can be taken and avoided. Do learn to read food labels carefully and avoid readymade and restaurant food such as bread rolls, breaded meats, fish, prawns, kebabs, nihari, cream soups and so on.

| FOOD GROUPS \& DAILY SUGGESTED INTAKE | FOODS ALLOWED | FOODS TO AVOID |
| :---: | :---: | :---: |
| Milk: (2 or more cups) | Whole, low fat, skim milk, butter milk(As desired) | Malted milk, some commercial chocolate drinks |
| Cheese(can be used for meat/ milk group) | All cheese such as cheddar, cottage, cream and Swiss. | Any form of cheese containing wheat/oat gum as an ingredient |
| Meat, fish, poultry: (6-8 ounces) Eggs: (whole/2 egg whites) | Any plain. Grilled, roast meats; fried provided if coating is gluten free. <br> Any form, as desired | Breaded, creamed or thickened gravy of wheat flour (patties, meat samosas), commercially prepared omelets. |
| Vegetables: <br> (2 or more servings) | All fresh vegetables, plain commercially frozen or canned vegetables (As desired) | Commercially seasoned vegetable mixes, commercial vegetables with cream or cheese sauce; canned baked beans |
| Fruits: <br> (3 or more servings) | All plain or sweetened fruits; fruits thickened with tapioca or corn starch | Commercial pie fillings, thickened with other than corn starch. |
| Bread/ chapatti: (6 or more servings) <br> Cereal: (1 or more serving) | Only those are specially made from rice, corn, soy bean, potato, arrowroot flour. <br> Corn flakes, rice flakes, rice and sago | All breads, rolls, biscuits, cake, samosa \& nan, chapatti made from wheat, millet, oat or barley flour. <br> All others containing wheat, malt and malt flavoring, including noodles, semolina, macaroni, spaghetti, vermicelli; porridge and bran or wheat germ containing breakfast cereals |
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| Desserts Gelatin; custard ;fruit <br> ice; specially prepared <br> cakes, cookies, and <br> pastries made with <br> gluten-free flour or <br> starch; pudding \& fruit <br> filling thickened with, <br> arrowroot or corn <br> flour; ice-lolly, kheer.Commercial cakes, <br> candies especially <br> chocolates, cookies, <br> pastries; commercial <br> dessert mixes, <br>  <br> sherbets, fruit tarts, <br> cream cones, typical <br> Asian sweets like suji <br> halwa, punjeeri, shahi <br> tukray and habshi halwa |  |  |
| :--- | :--- | :--- |
| Soups |  <br> soups made with corn <br> flour. | Canned soups \& soup <br>  <br> bouillion cubes. |
| Beverages | Coffee, tea; <br> decaffeinated coffee, <br> carbonated <br> beverages; chocolate <br> drinks made with pure <br> cocoa powder, soft <br> drinks, \& fruit <br> squashes | Cereal beverages e.g <br> malt, ovaltine, barley <br> flavored drinks, <br> commercial chocolate <br> milk, cocoa mixes, other <br> beverages mixes, <br> dietary supplements. |
| Miscellaneous | Salt, pepper; pure <br> spices \& herbs; yeast <br> pure baking chocolate <br> or cocoa powder; <br> flavoring extracts; <br> artificial flavorings. | Prepared mustard; <br> commercially prepared <br> meat sauces, pickles, <br> flavoring syrups <br> (pancakes or ice-cream |



References:

- Manual of nutritional therapeutics, fifth edition by lippincott williams \& wilkins (2008)
- Krause's food \& nutrition therapy, twelfth edition by saunders elsevier (2008)


## Important Note:

Food provided during hospitalization to patients is disease specific and during stay food from outside hospital is not permitted. Written and verbal instruction related to dietary restrictions is explained by clinical nutrition staff, where applicable.

| Outpatient Nutrition Care Clinics |  |
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|  |  |
| Nazarall Walji Building (NW 2) | Gastroenterology Clinic |
| Phone: (021) 3486-5789-90 | (JHS Building) |
| Monday to Thursday | Phone: (021) 3486-1055 / 3486-6308 |
| Timings: Morning 9:00am - 11:00am | Thursday |
|  | Timing: Morning 9:00am - 12:00am |
| Consulting Clinic (CC 4) | Sports \& Rehabilitation Clinic |
| Phone: (021) 3486-1034 | (Sports Centre) |
| Friday | Phone: (021) 3486-1662 |
| Timings: Afternoon 2:00pm -4:00pm | Tuesday |
|  | Timing: Morning 9:00am - 11:00am |
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