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BOOKS FOR ALL

DIET TO CURE Food Allergy

Health Series : Diet Cure

DIET TO CURE FOOD ALLERGY

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Introduction

Allergy represents the abnormal reaction of an individual to the food he eats, the air he breathes, or the substance he touches. Anything which produces sensitivity is known as an allergen.

Food allergy may be defined as an sensitivity occurring in certain parts of the body to one or more specific foods or any of their constituents. Usually the allergen is of a protein nature, but it is thought by some that carbohydrates, lipids and various chemicals may also be sensitizing agent at times.

Any food may produce reactions in some individuals, but most common are eggs, milk, wheat, grapefruit, orange, corn, tomato, chocolate, potatoes, fish and shell fish.

Food unlike in flavour and structure but belonging to the same botanic group may also result in allergic manifestations e.g. buckwheat is not of

the cereal family but in a group which include rhubarb. The sweet potato is not related to the white potato but is a member of the morning glory family. Spinach is frequent reactor in the same family with beats.

The following botanic classification of a few foods illustrates the relation of foods which at first thought appear to be dissimilar.

Cereal—Wheat, rice, barley, oats, malt, corn, cane sugar, rye.

Lily—Onion, garlic, asparagus

Gourd—Squash, pumpkin, cucumber, watermelon

Cabbage and Mustard—Turnips, cabbage, cauliflower, radish.

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Characteristics of Allergies

Some individuals are only mildly sensitive and can eat a particular food for several days before characteristic symptoms develop, while others have violent reactions within 1 or 2 hours. Allergies appear to be closely related to one's physical and emotional status, reactions to a substance may occur in a stress situation, but may not occur at another time. It has been seen that many food allergies tend to disappear during the course of psychiatric treatment.

Heredity appears to play a role in allergy, but one does not inherit a sensitivity to a specific substance nor to an identical manifestation of the allergy e.g. a child born to a parent who suffers from asthma may not develop asthma, but may have eczema or some gastric intestinal disturbances. The parent may be

sensitive to wheat and child to eggs and so on.

The skin and mucous membranes are particularly sensitive to offending substances. Since the substances may be carried by circulation to all parts of the body, it is reasonable to expect that manifestations will be many and varied.

Skin Tests

These have been much used in the past. A minute quantity of an extract of the suspected food is injected into the skin or rubbed into a scratch. If a weal develops and there is a surrounding red flase this is sometimes taken as an indications of sensitivity to the respective food. The presence of psudopedia extending out from the weal may be taken as further diagnostic evidence. Yet because a patient is sensitive to a foreign protein introduced into the skin in this way it does not necessarily follow that he is sensitive to the same protein when taken by mouth. Moreover the skin tests may be negative to a protein which is producing allergic reacting elsewhere e.g. in the gut. Such apparently, contradictory results are not uncommon. A possible explanation is that the cells in contact with the allergen are not necessarily the site of production of the appropriate antibody to it. It is only when the allergen combines with its specific antibody that symptoms arise.

The value of skin tests is limited by the frequency of contradictory. If however, there is a well-marked reaction to one single article of food, while tests of

other food extracts are negative, this may be of real diagnostic value, especially if it confirms a suspicious history.

Clinical Manifestation of Food Allergy

Food allergy may produce any of the various manifestations of sensitivity. Sensitivity to food may manifest itself in the respiratory system as coryza, conjunctivitis, manifestation bronchial asthma, in the alimentary system as an manifestation of gastro-entritis and in the autoreous system as dermatitis, urticaria in nervous system as headache, in genito urinary system as hematuria, in the articular system as arthoraligia.

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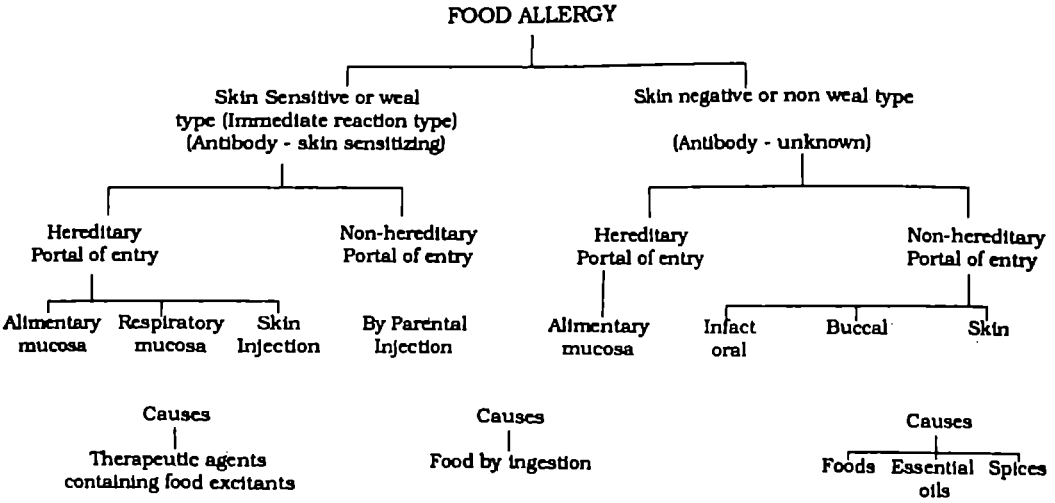
Classification Of Food Allergy



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Food Allergy in Children

It is not known why some infants develop a specific sensitization shortly after birth, although heredity may play a dominant role. "Spain" and "Cooke" have shown that where both parents are allergic, approximately 70 per cent of the offsprings develop a climatical allergic conditions by the age of 10 years. When there is an antecedent unilateral history of allergy, 50 per cent of the offsprings develop clinical allergic symptoms by the age of 30 years. It would seem, therefore, that both incidence and age of onset of clinical allergic conditions are influenced by the strength of the inherited trait. Infections, focal or constitutional, and changes in general health of the patient may play an important part in predisposing to the development and precipitation of allergic manifestations.

"Rather" and "Untracht" found that 5% of 500 allergic children were sensitive, clinically and by skin test, to a single food eg. egg. In the child, as in the adult, the allergic process can affect any of the body systems.

Types of Sensitizing Foods

Milk and eggs are usually the first foods to which the infant becomes sensitive, probably because they are among the initial foods comprising his diet. In Clien's series of 140 allergic infants 1 out of every 15 was allergic to cow's milk. Among the conditions they developed eczema, pylorospasm and colic while some felt "unhappy all the time". Less common symptoms were cough, choking and gasping, nose colds, constipation, asthma, anorexia, attacks of sneezing and toxemia.

The diagnosis is usually established by the hostory, the indirect skin test method, the food diary and trial and other procedures, senstivity to milk is frequent and presents a considerable though essential replacement problem. In the case of other foods, simple removal is sufficient, but where milk is to be avoided, some substitute that fulfils the nutritional, requirements must be given to the infant and young child. Such proprietary products as Mullsoy, Soyabean are often satisfactory milk substitutes unless the infant is also sensitive to soyabean in which case Nutramigen may be tried. Specifications for their use are supplied by makers of all these substances. Goat's milk, fresh or

canned, often offers a highly satisfactory replacement, although an allergenic factor common to both cow's and goat's milk may prevent its use.

The infant or child highly allergic to egg must avoid all traces of it and poultary as well. In those with a more moderate degree of sensitization the white of egg may be excitent; the yolk being readily tolerated as well as poultary .

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Diagnosis of Food Allergy

This may be extremely easy, but more often there is considerable difficulty. Clinical features may arise as a result of great variety of organic diseases. Alimentary disturbances such as dyspepsia, vomiting or diarrhoea, believed to be due to allergy may be caused by eating excessive amounts of indigestible foods or by food poisoning. Such symptoms can also be caused simply by emotional disturbances anxiety and worry. Such psychological factors may intensify the liabilities to allergic reactions in sensitive patients. Allergic reactions themselves may be cause of worry and distress.

The following are the diagnostic methods:

History Takings

The presence of a food allergy is often simple to identify in immediate type, but frequently difficult to locate in delayed type. It may be established by

(1) the history

(2) autaneous tests

(3) Food diary and

(4) Clinical tests.

History taking is the most important of all diagnostic procedures and should be completed first. It may provide information of great consequence, not only as to the specific food causes, but also as to the degree to which they affect the patient. With such knowledge the investigator is forewarned, and may avert what might have been a hazardous exposure of the hypersensitive patient to the active food excitent by routine skin testing or clinical trial. In the immediate reactions type where symptoms follow so swiftly upon exposure to the exciting food, the patient is usually fully aware of at least the more obvious and more potent food factors and the extent of disturbance they produce.

A comprehensive investigation of the occurrence of allergic conditions in the patient and his family should be obtained since the presence of asthma, allergic conditions in the patient and his family should be obtained since the presence of asthma, allergic coryza or hay fever in the antecedent or collateral members of the family furnishes evidence

of the inherited nature of sensitivity and strongly suggests that autaneous test will be of value sensitivity in any form may show itself in other members of the family, and at times the same specific food cause and the same pattern of symptoms may persist through many generations.

A point of diagnostic importance is the character of the symptoms. They may be acute, explosive in nature and even hazardous to life in the immediate reaction type, insidious although severe in delayed reaction type. A description should be obtained of the frequency, intensity, duration of symptoms, their relation to meals and to the daily, weekly or monthly routine of the patient. Such co-relation may be established through the maintenance of a food diary.

Both severity and periodicity of symptoms of food allergy may be influenced by other associated and intimately linked allergic conditions. Attack of hay fever and asthma, for instance, may intensify the attacks of food allergy or activate a latent food allergy. It is a frequent observation that hay fever patients are able to ingest without allergic discomfort such foods as peaches, melon, sweet corn, chocolate or seafood except during the hay fever season when they are extending with intense and disturbing symptoms of pollenosis. At these times, such foods may cause dormatitis, urticaria, bronchial asthma or increased coryza.

In food allergy, as in other types of sensitivity the frequency and severity of symptoms may be

influenced by wrong, anxiety and states of nervous tension. A young housewife to whose urticarial attacks were identified by positive skin test as due to celery was able to eat it without ill effect once the problems of her household budget were solved. Food nutritious for their outstanding antigenic activity and for high incidence should be particularly suspected. These are in most instances, ingested uncooked, hence with their characteristic proteins unaltered by heat. They are-milk, eggs, seafood, nuts, seeds as mustard, chocolate, orange and tomato. However, not only these but the individual items in all food groups such as meat, seafood, fruits, vegetables, cereals, beverages and spices must be considered separately and in detail.

Foods Eaten in Excess

Patients may eat in moderate amounts of food, efforts to gain or loose weight on unbalanced diets, or to economize milk, egg, tomato juice, orange juice and chocolate are common offenders. A candidate for the football squad may drink several quarts of milk daily to gain weight, a stenographer may eat many chocolate bars to save lunch money. Such extremes may lead to food intolerance, where a moderate and less monotonous intake of same foods would cause no discomfort.

Foods Eaten Though Disliked

Dislike of a food may be only a whim or a fancy, but it should be regarded as significant until proven otherwise. Aversion to egg or milk in children may

be the result of Nature's protective effort, often misinterested by parents.

Foods Eaten Though Known to Cause Allergic Symptoms in Another Member of the Family

A familiar allergy to a food such as egg or milk, in an antecedent or collateral member of the family directs suspicion against this food as a cause of the patent's symptoms.

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Diet List to be Given to an Allergic Patient

Dairy Products

Milk, cream, ice-creams, sherbets, cream of soup and other milk containing foods.

Butter, cheese except cream cheese and cottage cheese, Egg unless hard boiled for 10 minutes and egg containing foods as griddle cakes, waffles, egg sauce etc.

Meat and Fish

Chicken, duck, goose, turkey

Bacon, smoked ham.

Fresh pork and pork sausage lard

Lamb (roast) chops, kidney.

Beef, all beef products.

Veal (roast) chops, kidney

Shell fish (except oyster) fish.

Cereals of Bread Stuff

Wheat and wheat products as macroni, noodles, cream of wheat, shredded wheat, Bran flasks, cookies, cakes etc.

Rye (pure rye bread, rye krisp)

Corn (Corn meal muffins, cornflakes, Farina)

Oats, Oatmeal

Barley, Soyabean flour, Arrowroot, Tapioca

Vegetables

Asparagus Beans - all types beets, cabbage, carrots, cauliflower, celery, cucumber, greenpea, green pepper, lentils, lattuce, mushroom, mustard, onion (baked or boiled), pumpkin, radish, spinach, sweet corn, sweet potato tomato, lump, white potato (baked).

Fruits

Apples, apricots, banana, berries, cherries, date, fig, grape, fruit grapes, lemon, lime, orange, peeches, pears, pineapple, plums, prunes, raising, watermelon.

Beverages

All alcoholic drinks including beer, wine, chocolate, cocoa, coffee, tea, cola drinks.

Miscellaneous

Nuts, peanut butter, cardiments, highly spiced foods; Foods, fried in veg. oils such as cottonseed peanut and corn oils.

Excessively sweet foods.
Intensity cold foods or drinks.
Olive pure olive oil.
Gelatin.

Permitted foods should not be used constantly, but whenever possible in rotation.

Patients sensitive to milk, egg, wheat or nuts must be cautioned against the use of many preparations and food mixes supplied by manufacturers, such processed foods may contain specific food excitants in quantities sufficient to produce allergic symptoms, as in the case of egg and milk in pancake mixes for home use. Since the labels on packages of such products list all the ingredients, the patient should be urged to develop the habit of reading all such labels as a protective measures.

Food Diary

Entries should be made by the patient each day of the items of food, beverages and drugs ingested at each meal between each meal, and at bedtime. At the end of the day's entry, the patient should note any occurrence or continuance of his allergic symptoms. Once weekly the physician should attempt to correlate sensitive symptoms with

sensitive ingested items, the internal of from four hours to 3 days being a constant for each suspected item. Should it be found, for instance, that headache occurred consistently on the third day following the ingestion of egg that food should be suspected, but if the interval proved to vary, being 24 hours at some entries and 3 days at others, the case against egg would be weekened as too, it would be if headache did not occur in the majority of instances after egg was ingested. Foods suspected should be banned until subsequent verification by trial and error procedure.

Elimination Diets

The simplest attempt at elimination consists of removal from the diet of these foods most notorious as excitants; milk, egg, seafood, nuts, seeds, chocolate, orange tomato. Care must be taken to explain to the patient the need for thorough avoidance and he should be provided with a list of foods or food compounds in which the banned items may be present in disguised. The successful use of the diet depends on a strict adherence to the prescribed list of foods.

The patient is first placed on the diet which, on the basis of skin tests and a dietary history, is least likely to produce allergic reactions. The diet will be used from 1 to 3 weeks unless severe reactions have occurred in meantime. A second diet is then tried for a similar period. If there has been no adverse reaction to 2 or more diets; all foods on combined lists may be used. If the patient shows no

improvement on any of the diets, the allergy is probably not of food origin occasionally, the chronic nature of the symptoms requires a larger period for evaluation.

Provocative Diets and Intentional Feeding

The use of a diet consisting exclusively of milk, egg, wheat beef, orange and potato has been described by "Lee" and "Squier". This diet is given for one week unless the patient's previous history definitely contra indicates its use. Since the foods are commonly involved in allergies, any disturbances are likely to show up within the week. If no symptoms occur, foods are added to this regimen, are at a time. If symptoms do occur, other tests must be used.

The intentional feeding procedure consists in completely eliminating the test food from the diet for a week, following which it is eaten by the patient in substantial units 3 or 4 times a week. The test is repeated for 2 consecutive weeks. A food is not considered to be positive if it produces reactions only once in 3 weeks testing period. Intentional feeding helps to confirm positive skin tests, and also helps to detect sensitives where skin reactions were negative.

Synthetic Diets

Food allergies may sometimes be diagnosed quickly by means of synthetic diets. Such diets are made up of amino acids, sugar, salt mixtures,

vitamin concentrates water and in some cases emulsified fats, none of the constituents of the feeding will produce allergy. The feeding is given by mouth or through a tube inserted into the stomach. The formulas are unpalatable, so that only patients with major allergic manifestations are likely to have the fortitude to give the segment the necessary trial.

Patients who are allergic to food show marked improvements with the synthetic diet in a few days, while those who are sensitive to other materials than food will not improve. If it has been ascertained that food is responsible for the allergy, the feeding can be continued over a longer period of time, adding first one and then another of the important foods to determine which one may be safely included and which ones should be omitted.

ELIMINATION DIETS

Diet 1	*Diet 2*	*Diet 3*	*Diet 4*
Rice	Corn	Tapioca	Milk
Tapioca		White Potato	Tapioca
Rice biscuits		Breads made	Cane sugar
Rice bread		of any combination	
	Rye Bread	of any combination	
	Rye Krisp	of lime, bean and potato starch and tapioca flours.	
Lettuce	Beets	Tomato	
Chard	Beets	Tomato	
Spinach	Squash	Carrot	
Carrot	Asparagus	Lime beans	
Sweet Potato	Artichoke	String beans	

Diet 1	*Diet 2*	*Diet 3*	*Diet 4*
Lamb	Chicken	Beef	
	Bacon	Bacon	
Lemon	Pineapple	Lemon	
Grapefruit	Peach	Grapefruit	
Peas	Apricots	Peach	
	Prunes	Apricot	
Cane sugar	Cane or beet sugar	Cane sugar	
Seasam oil	Seasam oil	Seasam oil	
Olive oil	salt	Soyabean oil	
salt		salt	
Gelatin, plain or flavoured with lime or lemon	Gelatin, plain or flavoured with apple	Gelatin, plain flavoured with lime or lemon	
maple syrup or Syrup made with cane sugar flavoured with maple	karocom syrup white vinegar	maple syrup syrup made with maple	
Royal baking powder	Royal Baking powder	Royal baking powder	
Baking soda	Baking powder	Baking soda	
Cream of tartar	Cream of tartar	Cream of tartar	
Vanilla extract	Vanilla extract	Vanilla extract	
Lemon extract		Lemon extract	

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Treatment of Food Allergy

Elimination of the Causative Food

If a positive food factor is identified and can be eliminated from the diet, then the symptoms will not secure (e.g. if the responsible article of food is one which is not consumed regularly) e.g. shellfish, it can be easily avoided, it is far more difficult in the case of eggs, milk and wheat, which are present in so many foods. Other methods must be tried in such a situation.

Substitution of Alternative Foods

This is sometimes possible in case of milk. A child sensitive to cow's milk may not necessarily be sensitive to goat's milk. Similarly a child sensitive to wheat may do well on oats, rice or barley.

Denaturation of the Protein

Sometimes if a protein is denatured by heat it ceases to act as allergen. Thus a patient sensitive to raw milk or lightly boiled eggs may be able to take milk that is boiled or the hard boiled yoke of an egg. Patients who are sensitive to eggs may be able to take yolks, especially if well cooked, although the whites may continue to cause symptoms.

Hyposensitization

Food allergies tend to diminish in childhood if the causative foods are eliminated from the diets when mild allergies are present at any time of life, such elimination for a few weeks or months may suffice to restore tolerance for weeks months or even for years. In many patients, however, continued and complete elimination of allergenic food is necessary for one or several years. In others hyposensitization below the symptoms threshold never occurs, or only partial tolerance is regained.

When allergies to important foods such as wheat, milk, eggs or to large no. of important foods such as vegetables or fruits occur, hypodermic administration of antigens containing these foods has been attempted by many physicians. Minute doses of antigen containing 5 to 12 allergies in dilutions of 1 to 5,00,000 or even weaker, given every day or so and raised gradually according to the patients response may prove more beneficial. Oral hyposensitization also has been successful in certain hands.

Rotating Diets

In unusual cases in which sensitivity to so many foods exist that their diminature is next to impossible, a rotating diet may be tried. If the patient is only moderately clinically allergic to these foods, such a procedure may enable him to tolerate occasional exposure to the allergies with less severe reaction.

Effect of Age

In general patients tend to outgrow their sensitively to food known to have caused reactions in childhood may be tried months or years later when it is found that they can be taken again with the impurity.

Supplemental Nutritional Therapy

Whenever the diet is restricted in the essential nutrients these should be supplied by supplemented medication as following:

Calcium

Diet in which milk is restricted, should be supplemented by the oral administration of calcium. In view of the fact that many commercial preparations is tablet form may contain exceptions as actual or potential allergens (particularly constarch) we would recommend dicalcium phosphate in powdered form.

Ascorbic Acid

In those patients with a large number of fruit allergies, vitamin C should be given the Abblot preparation of ascorbic and 'cecon' contains only crystalline vitamin C and propylene glycol.

Vitamin B Complex

This drug is an absolute must with cereal elimination 'eryobeta' is both effective and quite free of suspicion from the excipient standpoint.

Drug Therapy

One must be cognizant at all times of the possibility of the development of specific sensitivity to various drugs employed in the non-specific treatment of a given case. Another important point is the common custom of including allergenic foods in drugs in the form of excipient, diluents and vehicles. This too is difficult because the Pure Food and Drug Act does not stipulate that such "inert ingredients as can starch, lactose, cornsyrups and others be labelled on medications. It is quite possible for a corn starch contained in a thyroid tablet taken every day or for a milk sensitive individual to have his chronic headache symptoms perpetuated by the daily ingestion of codeine containing milk.

Physicians in this work must be constantly alert to the possible allergenicity of all therapeutic agents employed in a given case. These include not only the foods ingested, the air borne inhalants in the

surroundings, but in addition all tropical applications e.g. A hospitalized milk sensitive patient complained of being constipated; the interne on the case promptly ordered a milk and molasses enema which resulted in a violent allergic reaction that increased the patient's hospitalization by an additional week. Errors of this type are common in hospitalized patients where the nursing staff is not fully educated in allergic diseases.

Drugs used for the relief of food allergy are usually the same as those used for the relief of any of the allergic reactions. Some of these are more effective for one type of symptom than for another. The beneficial results will also vary with different patients. Some of the drugs are - Aminophyllin, Acetysalicylic acid, Alcohol, Antibiotics (Pencillin, sulfadiazine), atropine, Benadryl, Butonefrine, chloral hydrate, Demerol, Ephedrine, ether, histamine and Pyribenzamine.

General Advice

It has already been said that every patient proved to be allergic to a particular food should avoid it at least for a time. Some years later he may be allowed to try it continuously especially if it is an important article of diet. All people with a well defined food allergy should know about it and inform their doctor, otherwise they may suffer a severe or even fatal reaction from a therapeutic injection given for treatment some other disease. For instance, a patient sensitive to eggs may react badly to immunizing injections prepared of an egg medium,

such as those for poliomyetis, influenza or yellow fever. Similarly patients who are sensitive to pork may develop an allergic response to soluble or zinc protomine insulin, should they develop diabetes malittus and require insulin injections. Insulin zinc suspension are useful in this respect since they are pure insulin, uncontaminated by species specific protein adulterants. Injection of liver extract derived from cattle may cause stock to patients who are allergic to beef.

8
Some Recipes Useful for Allergic Patients

The preparation of food for a patient with allergy may be a real problem especially when they move common types of foods produce allergic symptoms. It is not difficult to eliminate fish, shell fish and certain vegetables and fruits but when the offenders are milk, egg and wheat, meal planning and preparation cell for constant consideration. Some recipes are as detailed in Appendix.

9
Conclusion

A definition of clinical food allergy is the appearance of specific symptoms as a result of eating specific food and those symptoms occur in a cyclic manner or consistently in a given individual but not in the average individual. To what extent a good allergen is changed by digestion, intestinal absorption or liver function is unknown.

No single test is wholly reliable for the establishment of a diagnosis of allergy to any given food or foods. The procedures used include a careful history of the patient, skin testing and dietary testing programmes.

Many intelligent allergic patients knowing something of their disease, go to great length to avoid any food that may aggrevate it, some avoid so many kinds of food that they become undernourished so the diet should be supplemented with various nutrients.

Appendix

1. WHEAT, MILK AND EGG FREE RECIPES

Oatmeal Bread

4 tsp salt
3 cups rolled oats
1 cake of yeast
1/2 cup of sugar
2 tbsp lard
4 cups hot potato water
8-9 cups rye flour

Method

(i) Boil 1 potato rinse it and use that 4 cups of water for potato water.

(ii) Mix the rolled oats, salt, sugar and lard together and pour over it the hot potato water, let stand until lukewarm.

(iii) Add the yeast dissolved in about 1/2 cup of water and 9 cups of rye flour.

(iv) Mix well and let rise until double in size.

(v) Knead, put in pans and let rise again.

(vi) Bake for 1 hour at 350° F.

Rice and Rice Flour Muffins

1/3 cups rye flour	2 tbsp fat melted
2/3 cups rice flour	3/4 tbsp salt
1/3 cups water	2 tbsp baking powder
2 tbsp sugar	

Method

(i) Sift the dry ingredients together.

(ii) Add the water and melted fat.

(iii) Mix thoroughly and bake in small sized greased muffin tins. Temperature 375°F.

Oatmeal Rice Flour Cookies

2/3 cups oatmeal	1 tbsp melted fat
3/4 cup rice flour	1/3 cup water
1 tbsp cream of tartar	1/4 tbsp baking soda
1/2 tbsp vanilla	1/4 tbsp salt
10 tbsp brown or granulated sugar	1/4 raisins

Method

(i) Sift rice flour before measuring, mix dry ingredients and sift together

(ii) Add other ingredients and combine.

(iii) Drop from a teaspoon on greased tins.

(iv) Bake in a moderate oven until an even brown colour.

2. WHEAT AND MILK FREE RECIPES

Meringues

1 egg white	Dash salt
1/4 cup sugar	1/8 tbsp vanilla

Method

(i) Beat the egg white until stiff and dry.

(ii) Beat in gradually half the sugar and salt.

(iii) Fold in remaining sugar and vanila.

(iv) Drop in meringues by table spoonfuls on ungreased baking sheet.

(v) Bake in slow oven for 40-45 minutes.

(vi) Remove from sheet with wet knife.

Banana Bread

1 cup sugar	3 crushed bananas
1/2 cup shortening	pinch of salt
2 well beaten eggs	1 cup rye flour
1 tb.sp soda	1 cup corn starch

Method

(i) Cream the sugar and shortening and other ingredients in order given.

(ii) Bake for 1 hour in moderate oven in a bread pan.

Date Cookies

1 Egg
3/4 cups brown sugar
1/2 tbsp baking powder
2/5 cup soyabean flour
1/4 tbsp soda
1/4 cup chopped nuts
1/2 tbsp vanila
2/3 cup oat flour
1/4 cup dates chopped

Method

(i) Cream egg and sugar. Add remaining ingredients, after sifting flour together.

(ii) Grease baking tin.

(iii) Drop about 1 tbsp dough leaving 1" between each cake.

(iv) Bake in pre-heated oven about 8-12 minutes per pan.

3. WHEAT AND EGG FREE RECIPES

Baking Powder Biscuits

1 cup cornstarch
1 cup white rye flour
2 tbsp royal baking powder
1 cup milk
2-1/2 tbsp fat
1 tbsp salt

Method

(i) Sift dry ingredients together, work shortening into flour mixture, add milk, stir very quickly.

(ii) Drop in greased muffin pans and bake in a very hot oven (450°F).

Apple Crisp Dessert

10 apples
1/2 cup water
1 tbsp cinamon
6 tbsp butter
1/4 cup cornstarch
1 cup sugar
1/2 cup rye flour

Method

(i) Peel and slice apples into water in buttered pudding dish, melt butter, add to sugar and cinamon, add flour and place over apples.

(ii) Bake for 1 hour in moderate oven.

(iii) May be served with whipped cream or hard sauce.

4. MILK AND EGG FREE RECIPES

Pancakes

1/2 cup millet cereal
1 tbsp baking powder
1/2 cup rice flour
1 tbsp shortening
1/2 tbsp salt
1 cup water
1 tbsp sugar

Method

(i) Mix cereal, flour, baking powder, salt and sugar.

(ii) Dissolve shortening in lukewarm water.

(iii) Blend with dry ingredients.

(iv) Bake on hot griddle.

Tea Biscuits

1/2 cup lukewarm water	2 cups white flour
1 tbsp sugar	1 tbsp shortening
1/4 tbsp salt	1/2 cake yeast dissolved in 1/4 cup water

Method

(i) Place sugar, salt and shortening in mixing bowl, add 1/2 cup water, add dissolved yeast and 1-1/2 cup flour.

(ii) Beat to a light butter.

(iii) Let rise to double its bulk, then add 1/2 cup flour and let rise again.

(iv) Shape into biscuit form, let rise till light and bake in quick oven (400°F) for 25 minutes.

5. WHEAT FREE RECIPES

Millet Bread

1 cup sour cream	1 tbsp baking powder
1/4 cup sugar	1 egg
1/2 tbsp salt	1/2 tbsp soda
1 cup permitted flour	1 cup millet

Method

(i) Mix sour cream and soda, add sugar and then beaten egg.

(ii) Add flour mixture sifted with baking powder.

(iii) Bake in buttered bread pan for 1 hour at 400°F.

Gold Cake

1-1/4 cup rye flour	3/4 cup milk
1-1/4 cups potato flour	1-1/4 cup sugar
8 eggs yolks	3/4 cup butter
2-1/2 tbsp baking powder	1/2 tbsp lemon cobalt

Method

(i) Sift flour and baking powder together.

(ii) Cream butter and sugar, add egg yolks, beaten until thick and lemon coloured.

(iii) Add flour alternately with milk.

(iv) Beat well after each addition.

(v) Add flavouring.

(vi) Bake in three greased tins in 350°F oven for 25 minutes.

6. MILK FREE RECIPES

Honey Drop Cookies

1/2 cup lard	Juice of 1 lemon
1/2 cup sugar	3 cups of flour
1 cup honey	1 tbsp baking powder
2 eggs	

Method

(i) Cream lard and sugar.

(ii) Add honey, lemon juice and eggs, beaten.

(iii) Blend with flour and soda.

(iv) Drop by teaspoonfuls on greased cookie sheet and bake in a moderate hot oven until done.

Cornflakes Krisp

2 egg whites
1/4 tbsp salt
1/2 cup sugar
1/2 cup coconut
1/2 cup nuts, chopped
1-1/2 cups cornflakes
1 tbsp vanila

Method

(i) Beat egg whites until frothy.

(ii) Sprinkle salt over top and beat until stiff, gradually adding sugar.

(iii) Add coconut, nuts and cornflakes.

(iv) Drop from spoon on cookie sheet covered with wafed paper.

(v) Bake at 350° F for 15-20 minutes.

7. EGG FREE RECIPES

Waffles

1 cup flour
3/4 butter milk
1/2 tbsp baking powder
1/2 tbsp sugar
1/4 tbsp soda
1-1/2 tbsp melted shortening
1/2 tbsp salt

Method

(i) Sift together the flour, baking powder and salt.

(ii) Mix with butter milk.

(iii) Add soda dissolved in little water.

(iv) Add melted shortening and sugar and mix well.

(v) Heat for 10 minutes before needed.

(vi) Cook each waffle for 4 minutes.

Spice Cake

1 cup sugar	2-1/2 cups flour
1 tbsp cinamon	1 tbsp baking soda
6 tbsp butter	1 cup seedless raisins
1 tbsp vanila	1 cup butter milk
	1-1/2 tbsp ground clog

Method

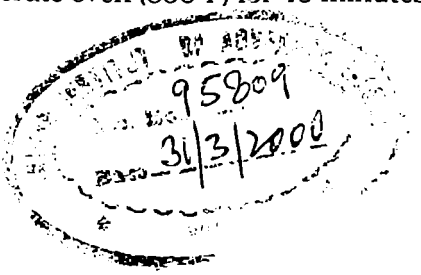
(i) Cream sugar and butter.

(ii) Add butter milk, in which soda has been dissolved, vanila sifted dry ingredients and raisins.

(iii) Grease and cover with greased paper on square cake pan.

(iv) Pour in butter.

(v) Bake in moderate oven (350°F) for 45 minutes.



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