

SWANK MULTIPLE SCLEROSIS NEWSLETTER



March 1992

From the office of Roy L. Swank M.D., Ph.D.
Editor: Barbara Brewer Dugan

Edition #46

MORE ABOUT EARLY DIAGNOSIS

In previous newsletters (#41 & #42), it was shown that there is a close relationship between saturated animal fat consumption and the ravages of multiple sclerosis (MS). Reduction of the fat intake was shown to be attended by reduction of the frequency of exacerbations and a slowing of the progress of the disease. In very early cases the benefits could be considerable; 95% of minimally disabled patients who carefully followed the diet remained free of significant additional neurological disability throughout the entire experimental period of 34 years. (Swank and Grimsgaard, American Journal of Clinical Nutrition, Vol 48, p. 1387, 1988; Swank and Dugan, Lancet, Vol. 336, p. 37, 1990; Swank, Nutrition, Vol. 9, 368, 1991.

In the treatment of MS, the doctor is presented with a difficult diagnostic problem, particularly in early cases when ambulation and other functioning is normal, or nearly so, and the outlook for recovery is good.

Early symptoms which are suggestive but not diagnostic of MS have been discussed before (see newsletter #22, March 1985). These will alert the physician to the possibility of MS and lead to further investigation. Although the MRI scan is often negative in early cases, it is of considerable value when positive. The same can be said of the Red Cell Mobility test which we use to aid in confirmation of MS. Examination of Cerebral Spinal Fluid has high confirmation value in late cases, but is of little value in early cases, often showing evidence of MS in no more than 50% of cases. All three tests are non-specific for multiple sclerosis.

For early diagnosis of MS the physician has to rely on the clinical history

and examination. He is thankful when a laboratory test supports him, but because of the non-specificity of the tests the diagnosis depends on the physician's clinical evaluation alone.

A few more words about the MRI scan are necessary. Many neurologists still feel that without a positive MRI scan the patient does not have MS. I have already stated that a positive MRI scan is not necessary to make the diagnosis since frequently the MRI will be negative in cases which, from a purely clinical point of view, are clearly MS.

In a policy statement published in the Journal of Neurology in October, 1986, and by nine members of a working group for the National Multiple Sclerosis Society, it was concluded that among other things the failure to find lesions with the MRI scan does not rule out MS as a diagnosis. Even with assistance of the MRI scan, the diagnosis of MS remains a clinical one and must be made by an appropriate experienced clinician, taking into consideration both the clinical presentation and the laboratory findings (including the MRI). When a diagnosis of MS is made on clinical grounds, the use of MRI is not required for confirmation.

Improvements in MRI scanning have been made since this policy statement appeared, but for practical purposes the policy statement still stands.

DIET AND ATTITUDE

We have already discussed nervous tension and the effects of psychological and traumatic stress on MS patients. In this newsletter we will discuss the importance of an optimistic attitude and family support when following the Swank low fat diet program.

A strong attitude is important when bombarded by outside advice by family and friends to discontinue low fat diet therapy. Without determination and discipline the chance that the patient will stay on diet and make recovery is limited. To follow a strict low fat diet may interfere with a patient's social life. Lunch and dinner parties or the eating habits of a spouse or friends may tempt the patient to stray from diet. One cannot expect to change the habits of a group but it is often possible to change the eating habits within one's own family. Family support makes it easier for the patient to remain on diet. It is also becoming clear in the medical community that low fat diet is important to everyone, especially children, in preventing heart disease, diabetes and other disease later in life.

It is important that the patient be encouraged by family and friends to be optimistic about his/her condition. The patient must view the disease realistically and understand limitations in lifestyle. Patients must understand that fluctuation in the progress of disease does occur during improvement as well as during remission. These fluctuations can be controlled by suitable rest, non-fatiguing exercise, careful adherence to diet and periodic communication with the physician. In many cases sedation or anti-depression therapy in small doses is helpful or necessary. Unfortunately patients who tend to be pessimistic or depressed may overreact to fluctuations of the disease.

DANGERS OF OVERHEATING

Once a year we find it wise to warn MS patients about the dangers of becoming overheated. Sensitivity to heat may not be noticed early in the disease but, as symptoms develop the sensitivity

of your body to heat becomes apparent to all MS patients. Patients are also sensitive to cold, and are apt to be most comfortable in a narrow range of temperatures between 60-80 degrees F. There have been several proposed hypotheses for the heat effect. An early hypothesis was suggested by a Bostonian friend of mine who has collaborated with me in brain wave research. He suggested that it is due to direct sensitivity of the brain and spinal cord to heat, causing slowing of nerve transmission. However, studies of brain warming with thermometers deep in the auditory canals and elsewhere close to the brain show that the temperature of the brain is changed little by body heat. There is a very high flow of blood from the brain through the skull to outside venous channels. This prevents significant elevation of brain temperature.

I have suggested that this sensitivity to heat is due to shunting of large amounts of blood to the skin, which radiates excess heat to the surroundings. In this way the skin keeps body temperatures near normal, but at the same time, muscles and central nervous tissues are deprived of their normal blood supply, a state referred to as ischemia. Ischemia may develop in unusually hot weather from exposure to the sun, working in hot surroundings, taking hot baths, showers or hot tubbing, and from infections which cause an increase in general body temperature with or without fever (sore throat, cold or bladder infection). In each of these instances, mild to severe aggravation of neurological symptoms occur, leading to varying degrees of disability lasting variable periods of time. Usually patients recover from this insult, but in exceptional cases permanent damage occurs and is followed by a progressive increase in disability. Is it a wonder that I feel it important to remind you of the dangers of becoming overheated?

SOMETHING FISHY

You are probably aware of the recent allegations about contaminated tuna. We are sorry to report from a very reliable source that this is true. The reason for this is that fish canneries have no mandatory inspection laws. What we can do as consumers is push for more regulations and clean canneries.

As for eating fish; it is important to be particularly careful in your selection. The market in which you buy fish should not have a strong odor, if it does this usually means the fish has been around for some time. The eyes of the fish should look bright, not cloudy. You can ask the market if they participate in mandatory inspection.

VITAMIN SUPPLEMENTS

A number of patients are supplementing their diets with an assortment of vitamins, minerals and herbs.

Let me just say, vitamins alone do not give you more energy. They serve as helpers to the enzymes that release energy from carbohydrate, fat and protein.

The energy yielding nutrients found in foods, carbohydrate, fat and protein are broken down in the body during digestion, absorbed in the blood and fuel the body.

Carbohydrate is dismantled to glucose and stored as glycogen. The brain and nervous system can utilize only glucose for fuel. Complex carbohydrate serves as a major source of energy for the body.

Fats dismantle to glycerol and fatty acids. Triglycerides are then stored in the body for energy demands.

Proteins are dismantled to amino acids and used for body structure. Protein can be converted to glucose and used for energy when necessary.

A diet deficient in carbohydrate, fat and protein will produce a lack of energy. Supplementing the diet with large amounts of vitamins will only deplete your pocket book.

The water soluble vitamins, B's and C's are for the most part excreted from the body when not needed. Supplements several times greater than the RDA (Recommended Daily Allowance) have been reported to cause toxicity in some cases.

Deficiencies are seen in vegetarians lacking in B¹². Supplementation may be necessary.

The fat soluble vitamins A, D, E and K are not excreted from the body but stored in the liver and tissues. The risk of toxicity is greater because of this and supplementation should be carefully monitored.

To produce optimal energy levels it is important to eat at least 4 servings of carbohydrate daily. Rice, potatoes, pasta and bread are excellent sources of complex carbohydrates that promote high energy levels. Following depletion of carbohydrates the body will use fat for energy. Because your diet is low in saturated fat at least 4-6 teaspoons of unsaturated fat should be maintained daily. If active and exercising this levels should be increased accordingly to a maximum of 10 tsp.

To supplement the Swank diet only one multiple vitamin with minerals is recommended. Also, an additional 500 mgs of vitamin C to aid in prevention of bladder infection and 400 I.U. of vitamin E to serve as an antioxidant for the polyunsaturated fatty acids.

Cod liver oil, one tsp, or 4 capsules is strongly recommended to increase the fatty acids. If unable to take cod liver oil, Omega III fatty acids, which can be purchased at most pharmacies or health food stores, can be substituted. The amount to equal no more than 1 tsp should be taken.

When purchasing vitamins be careful of health food claims indicating natural is better than synthetic. The body does not know the difference. Synthetic means only that the vitamin was made (synthesized) in a laboratory not that it is made from unnatural forms.

A few words about protein supplements. They are not necessary. They will not supply the body with more energy. Remember carbohydrate and fats produce energy. Excess protein is stored as FAT in the body. Athletes taking protein supplements in excess of what the body uses build fat not muscle.

Remember, in excess, Carbohydrate, Fat, or protein will be stored as fat and cause weight gain.

RESEARCH UPDATE

As we look to the future I am optimistic. Nearly 40 year's experience with the low fat diet have given us a "potentially" powerful method to control the disease. I only use the word "potentially" since it is necessary to make a diagnosis early if we are to get totally satisfactory results.

We are now well started in our work on the plasma. After many years we convinced ourselves that there is something in plasma, presumably a protein, which is an important factor in the disease. More recently we have identified an abnormal protein component in plasma. Plasma from a large number of MS patients has been examined and all contained the abnormal protein, which is not found in tests of normal subjects.

There is still a great deal to do. We must prove beyond a doubt that this abnormal protein is the cause and not the result of the disease. Then we must look to the possibility that it can be used to assist in early diagnosis of the disease. Finally, can it be used as therapy of the disease?

With your help, and clearly I mean your financial help, I believe we will be able to answer all of these questions. As you can see I am asking those of you able to do so to contribute again to this cause.

As usual, I have included a form with this application to assist you.

Sincerely,

Roy L. Swank

RESEARCH FUNDING

To remind you of our increasing need for research funding, we are inserting this form to be completed when donating money for research. Thank you.

MAIL TO: Roy L. Swank, M.D., Ph.D.
Swank MS Clinic - MP140
3131 SW Sam Jackson Park Road
Portland, OR 97201

CONTRIBUTOR'S NAME: _____

ADDRESS: _____

AMOUNT OF DONATION: _____

**MAKE CHECKS PAYABLE TO: O.H.S.U.
FOUNDATION SWANK M.S. RESEARCH**

OFFICE TALK

NEWSLETTER SETS NOW AVAILABLE

Complete sets of the Swank Newsletter, dating back to 1977, are available. You might want to have a complete set in a notebook if you do not already have one. Many patients refer to their newsletters frequently and often share them with friends. You might want to recommend the Newsletter Set to a friend or acquaintance with multiple sclerosis to have as their own reference guide. We have sent many sets to interested family members, MS patients who are unable to come to see Doctor Swank for various reasons, support groups, etc.

Anyone wishing to obtain a copy should send a check for \$20 along with the mailing address and the set will be mailed out immediately.

Make checks payable to **O.H.S.U. Foundation - Swank**. Please mark in memo area on check "Newsletter Set".

PHONE NEWS

We are aware that the new telephone service installed by the university was less than adequate for handling your calls. We apologize for the inability to get through to our office. Many calls were lost and many patients have been frustrated.

In an attempt to solve this problem we have discontinued our present telephone service and have installed our own system.

When the secretary is taking a call the telephone will roll over to another desk. If that line is also busy we have installed an answering machine for messages.

We hope this system will meet your needs. Thank you for your cooperation and patience.

NEWSLETTER SUBSCRIPTION

Don't forget it is time to subscribe to the Newsletter. We will be producing several issues this year. The subscrip-

tion price is \$20.00. Those of you who are able to pay for the subscription will be helping us produce this informative publication for all.

Make checks payable to **O.H.S.U. Foundation - Swank**. Please mark memo area on check "Newsletter". A receipt for your donation will be sent to you from the Foundation.

COD LIVER OIL PRICE INCREASE

Due to a 10% increase in price from the distributor, we have had to increase the price to you for cod liver oil. The new prices are as follows:

\$16.50 picked up at the office

\$18.50 mailed to you upon receipt of your check

Make your check payable to **O.H.S.U. Foundation - Swank**. Please mark memo area on check "cod liver oil".

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OREGON HEALTH SCIENCES UNIVERSITY
ROY L. SWANK, M.D., Ph.D.
SWANK MS CLINIC - MP140
3181 SW SAM JACKSON PARK ROAD
PORTLAND, OR 97201

CHEF'S CORNER

BLACK BEAN CHILI

- 2 1/4 cups dried black beans
- Water
- 1 cup tomato sauce
- 6 tablespoons tomato paste
- 2 tablespoons lime juice
- 2 tablespoons red wine vinegar
- 1 cup chopped onion
- 1 cup chopped celery
- 1 cup chopped green bell pepper
- 1 cup chopped tomatoes
- 1 medium jalapeno pepper, **seeded and chopped** (see note)
- 4 to 5 cloves garlic, **finely chopped**
- 1 tablespoon finely chopped **fresh cilantro**
- 1 1/2 teaspoons ground coriander
- 1 1/2 teaspoons ground cumin
- 1 tablespoon chili powder
- salt
- pepper

Wash beans and place in a large bowl and cover with water. Soak overnight. (Beans will double in size during soaking process.)

Drain beans and place in a large soup pot. Add approximately 8 cups water. Bring beans to a boil and stir in tomato sauce, tomato paste, lime juice, red wine vinegar, onion, celery, green pepper, tomatoes, jalapeno, garlic, cilantro, coriander, cumin and chili powder. Add salt and pepper to taste. Continue cooking until beans are soft, 45 minutes to 1 hour.

Note: When preparing fresh chilies, wear rubber gloves for protection against oils that later can cause burning sensation on skin.

VAUGHN'S CORN BREAD

- 1 1/2 cups cornmeal
- 1/2 cup all purpose flour
- 1/4 cup vegetable oil
- 1 1/2 cups buttermilk
- 2 teaspoons baking powder
- 3 tablespoons sugar
- 1 teaspoon salt
- 1/2 teaspoon baking soda
- 2 eggs

Heat oven to 450. Mix all ingredients; beat vigorously 30 seconds. Pour into greased round pan, 9x1 1/2 inches, or square pan, 8x8x2 inches. Bake until golden brown, 25-30 minutes. Serve warm. Makes 12 servings; 145 calories per serving.

Chili Corn Bread: Stir in 1 can (4 ounces) chopped green chilies, well drained.

Corn Muffins: Fill 14 oiled medium muffin cups, 2 1/2x 1 1/4 inches, almost full. Bake about 20 minutes.

Corn Sticks: Fill 18 greased corn stick pans almost full. Bake 12 to 15 minutes.

Skillet Corn Bread: Pour batter into oiled 10 inch oven proof skillet. Bake about 20 minutes.

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June 1992

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Editor: Barbara Brewer Dugan

Edition #47

ABOUT MUSCLE & JOINT PAIN

We are told that MS patients seldom suffer from pain. This is the teaching of most textbooks of Neurology. This misconception is probably due to the fact that most studies and observations of the disease have been made on patients with severe disabilities, those patients who ambulate very little or not at all. On the other hand, when one examines patients who are able to ambulate with little or no restriction, one is impressed by the frequency of severe pains which they suffer. This pain is in the muscles and joints, particularly of the lower extremities. They are related to being on one's feet, standing or walking. They may continue to be present after going to bed and interfere with sleep. These symptoms may occur early in the disease, sometimes before clearcut neurological findings have been established.

These pains may be brought on or made worse by hot weather, a hot bath, nervousness or physical activity. Standing in place for a long time can also increase the pain. Many female MS patients suffer from leg pains starting several days before their menstrual periods and lasting for five to seven days.

These pains are aching in nature and are unrelated to neurological findings — in fact, they may occur in limbs entirely free of neurological complaints or findings. They are relieved by resting, particularly by lying down. Muscle relaxants and medications designed to reduce spasms are of little benefit. Analgesics or mild sedative may give relief or moderate the pain. In some cases it may be necessary to use a stronger pain medication temporarily. Patients who suffer mostly at night may be relieved by sleeping in sweat pants. If the pain is localized to the calf or knee of one leg, it sometimes is relieved by the use of a

heating pad, but if the pad warms up the entire body the pains will increase and may spread. Those patients receiving fresh frozen plasma are usually free of pain for one to several months.

I do not believe that the muscle and joint pains are due to the MS lesions in the brain and spinal cord. More likely they are related to circulatory deficiencies which I believe are widespread in the disease. This is indicated by the very cold extremities, sensitivities to heat, subcutaneous hemorrhages and abnormal capillary changes at the base of fingernails and in the conjunctiva which have been observed by several investigators. Our own studies have demonstrated rapid regression of cerebral circulation over time in MS patients. Aside from signs and symptoms clearly due to lesions in the central nervous system, both fatigue and general weakness in addition to muscle and joint pains are, in my opinion, probably due to circulatory ischemia (deficiency).

In some patients, clearcut neurological findings initiate the evidence of disease. In others what I consider to be vascular inadequacies occur first. As the disease progresses, however, in all but a few cases both aspects of the disease become apparent.

Vascular disease due to atherosclerosis, as commonly understood, rarely develops in MS patients on our low fat diet, so one asks just what kind of vascular disease do MS patients have. It is my feeling that the problem concerns the microvascular system, the capillaries, pre-capillary arterioles, and post capillary venules. This is suggested by the very slow return of capillary flow after blood is pressed out of the ventral fleshy part of the fingertip, by frequent subcutaneous hemorrhages, by the tendency of patients to have pitting edema of dependent extremities, and by the breakdown in blood-brain barrier dem-

onstrated as early as 1949 and confirmed and amplified in recent years with the CT scan and MRI scan.

ABOUT VISUAL PROBLEMS

Patients are often more concerned about their vision than about anything else which may happen to them. It is true that frequent impairment of vision occurs, but by and large recovery follows, not always to normal vision but to useful vision. Legal blindness, which means that useful vision has been lost in both eyes, has been rare in patients on low fat diet, probably no more than 1 in 300 patients in my experience.

There are two main ways in which one's vision can be reduced: diplopia (double vision) or optic neuritis. In *optic neuritis*, the patient may first notice pain in back of and in the eye followed by misty or foggy vision. Once recovery has occurred, pain can recur without the blindness. If the loss of visual acuity is in one eye, frequently it is not marked. In some cases the loss is primarily in the center of the visual field. Generally, visual loss lasts from a few to many days, but a loss for one or two hours or up to 24 hours has been reported by our patients and observed in a few instances. In this type of visual loss recovery is usually complete. In some cases total loss of vision may occur and recovery may not return to the previous level. However, in most cases the vision in the affected eye will become useful, making reading, depth perception and perception of most colors recognizable.

Examination of optic nerve transmission and of temporal vision with flicker fusion tests readily confirm the patient's story of lost vision, even though the patient has "completely" recovered. Loss of vision in both eyes simultaneously is unusual.

The "unaffected" eye, without the patient's notice, may also lose a bit of sight. This probably explains why, later upon examination, it will be found that both eyes have suffered, one seriously, the other slightly. Following the initial relatively rapid period of recovery of vision, patients on low fat diet usually continue to improve for several years, but at a very slow rate.

Upon examination, the optic disc may appear pale. In this case the MS lesion occurred near the optic disc. The paleness is due to loss of blood vessels (capillaries). Frequently, however, with time the disc recovers some of its pink color. When the lesion occurs in the optic nerve or tract at a distance from the optic disc, usually the disc is unaffected and upon examination has normal color.

Treatment consists of rest and insulation from stress. Rest consists of resting in bed one hour twice daily in addition to a good night's sleep. If necessary, the patient is given mild sedation both for sleep at night and during the day. A recently published study notes that prednisone is not significantly helpful in optic neuritis.

Vision is interfered with in another way even when visual acuity is normal in both eyes. If the two eyes are not focused exactly on the same object or scene, *double vision* (diplopia) will result. If the focusing is only slightly misaligned the picture viewed by the patient will be blurred. If the misalignment is greater, the object or scene will be distinctly double.

The alignment of the eyes is controlled by six small but very special muscles, each heavily endowed with nerve fibers. Weakness of any single or combination of muscles results in misalignment, usually of one eye. The alignment may be so bad that the involved eye can be seen to point independently of its partner eye, or so slight that special instruments are required to measure or judge the misalignment.

As mentioned, double vision may be slight or marked. However, it has a considerable capacity for recovery. Once recovered, physical or psychological stress can cause short recurrences of the diplopia, and in some cases cause the patient to feel a pulling alongside the eye prior to or without doubling. Treatment of this visual problem is the same as for optic neuritis, namely rest and mild se-

dition if necessary. Recovery is relatively rapid if treatment is followed, and as a rule it is complete. In our patients on low fat diet, failure to totally recover is rare.

Other visual problems include *nystagmus*, a condition in which both eyes twitch or oscillate in unison. This is usually seen on lateral or upward gaze. It also may be present when looking straight ahead. Usually vision is reasonably good. When nystagmus is severe the patient may suffer from vertigo and imbalance and may be nauseated with a tendency to vomit. Permanent nystagmus which can be recognized with the naked eye develops rarely in patients on our low fat diet.

Finally, double or *blurred vision* can occur on rare occasions due to a defect in one eye. This is due to lack of uniformity of the slope of the fovea which is an elevation of the retina located in the center of the eyeball, a short distance from the optic disc. This is a permanent defect frequently correctable by glasses.

MS AND THE FAMILY

Following the diagnosis of multiple sclerosis, the spouse and family members are usually frightened and unaware of what might happen next. A clear understanding of the physical and mental symptoms of the illness are critical if the family is to maintain equilibrium.

The early symptom of deep fatigue is often accompanied by changes in personality. Patients may become irritable, weepy and tend to withdraw. Minor confrontations may become exaggerated. Decisions become difficult to make and a tendency to dwell on unresolved situations occur. At this point the family becomes frustrated and a crisis may develop.

RECOGNIZE-REASON-REST - and RESULTS When the symptoms of fatigue are first *recognized*, the spouse and family must suggest to the patient that rest is necessary and *reason* with the patient regarding the outcome if they don't *rest*. If the "4R's" are followed, good *results* usually follow in a few days.

One of the most difficult problems, however, is convincing the patient that they are in fact tired. The usual response is "No, I am not tired" or "How can I rest when I have so much to do".

To avoid the situation, ground rules need to be set during the period of time when the patient is fully well. Family members can express their fears and concerns regarding the patient's illness. This usually fully resolves the frustration of children and spouse.

When the patient ignores the advice of the family to rest, and continues to push until intensification of their symptoms develop, a "we told you so" attitude by the family may develop.

During acute activity of the illness, patients become frustrated because of the inability to keep up. Simple tasks become overwhelming. A feeling of inadequacy and self-criticism may result. In the attempt to prove themselves "equal", increased frustration by the patient and family results, and symptoms again intensify.

Support and encouragement are crucial. A feeling of optimism must be expressed by the family as the patient is very fragile at this point. Outside support systems may be necessary, such as counseling or a MS support group, if problems persist and the family begins to pull apart.

We encourage family members to accompany the patient to their appointments. At this time the patient's limitations can be discussed and fears of the unexpected can be resolved.

It has been our experience that if family members are supportive of the patient's needs, and the patient recognizes their limitations early on, major family crises can be avoided.

ATTENTION PATIENTS

I will be returning to school in the Fall, my office hours will be as follows:

Monday 1-4pm
Wednesday 9-4pm
Friday 9-4pm

I am trying to arrange my schedule to accommodate appointments. I hope this will not be an inconvenience.

Barbara Dugan

CLINICAL & RESEARCH UPDATE

Our last newsletter emphasized that our clinical work had shown that control of the MS was possible by the very low fat diet. *If the diagnosis is made early before disability develops one has better than a 90% chance to avoid disability.* In addition to the diet it is necessary to limit nervousness (stress) and fatigue from overwork.

The work on plasma has gotten to the stage where it is very complicated and difficult, but progress is being made. This must be continued.

In addition to financing further work on plasma in London, we also must finance the clinical work from which many of you benefit. Because contributions to our work have lapsed this past year, we are now faced with a critical financial short-fall. Closing down the clinic would be a "bitter pill" for all of us to swallow, but unless we get additional help soon this is possible.

With your generous help, we will surely mount this financial hazard and carry on. The solution to this disease is possible, but only if we continue the struggle.

Sincerely,

Roy L. Swank, M.D., Ph.D.

RESEARCH FUNDING

To remind you of our increasing need for research funding, we are inserting this form to be completed when donating money for research. Thank you.

MAIL TO: Roy L. Swank, M.D., Ph.D.
Swank MS Clinic - MP140
3131 SW Sam Jackson Park Road
Portland, OR 97201

CONTRIBUTOR'S NAME: _____

ADDRESS: _____

AMOUNT OF DONATION: _____

MAKE CHECKS PAYABLE TO: O.H.S.U.
FOUNDATION SWANK MS RESEARCH

OFFICE TALK

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Make checks payable to **O.H.S.U. Foundation - Swank**. Please mark in memo area on check "Newsletter Set".

NEWSLETTER SUBSCRIPTION

Don't forget it is time to subscribe to the Newsletter. We will be producing several issues this year. The subscription price is \$20.00. Those of you who

are able to pay for the subscription will be helping us produce this informative publication for all.

Make checks payable to **O.H.S.U. Foundation - Swank**. Please mark memo area on check "Newsletter". A receipt for your donation will be sent to you from the Foundation.

COD LIVER OIL PRICES

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\$16.50 picked up at the office

\$18.50 mailed to you upon receipt of your check

Make your check payable to **O.H.S.U. Foundation - Swank**. Please mark memo area on check "cod liver oil".

VACATION NOTICE

The office will be closed for summer vacation from Friday, 7 August 1992 until Tuesday, 9 September 1992. However, there will be someone in the office during regular business hours to

answer the phone. Doctor Swank will be in London from Friday, 11 September 1992 until Monday, 28 September 1992.

PORTLAND MS SOCIETY

In the Portland, Oregon area there are two MS Societies, the Portland MS Society and the National MS Society.

The Portland MS Society is active in the MS community. They are the only organization which funds a home aid program for MS patients. They sponsor patient events several times a year and supply transportation for patients. They are funded by private donations and fund raising events. Monthly meetings are held by the Board of Directors at the Davis Business Center, 4370 NE Halsey in Portland, Oregon.

Volunteers are needed to help with mailings and patient events. If you are interested, please call Candace at (503)-249-0070.

The National MS Society, also located in Portland, is actively involved in fund raising for research.

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OREGON HEALTH SCIENCES UNIVERSITY
ROY L. SWANK, M.D., Ph.D.
SWANK MS CLINIC - MP140
3181 SW SAM JACKSON PARK ROAD
PORTLAND, OR 97201

CHEF'S CORNER

MELT-IN-MOUTH BLUEBERRY CAKE

2 egg white
1/4 cup sugar
1/2 cup oil
1/4 tsp. salt
3/4 cup sugar
1 tsp vanilla
2 egg yolks
1 1/2 cups flour
1 1/2 cups blueberries
1 tsp. baking powder
1/3 cup milk
sugar sprinkler

Beat egg whites with 1/4 cup sugar until stiff. Set aside. Add salt and vanilla to oil. Add egg yolks and beat until light and creamy. Take small amount of flour and toss gently with blueberries so they don't settle. Sift remaining flour with baking powder. Add to batter alternately with milk. Fold in beaten egg whites and blueberries. Bake in 8" square pan and sprinkle with sugar. Bake at 350 50 to 60 minutes or until cake springs back when lightly pressed.

Total Fat = 2 tsp
Total Oil = 24 tsp

QUICK CHOCOLATE- PEANUT BUTTER COOKIES

Bring to a full boil (stirring often):

2 cups sugar
1/2 cup canned evaporated skim milk
2 Tbls. Oil
1/4 tsp. butter flavor
3 Tbls. Hershey's Chocolate Syrup

Take off heat -

Add 2/3 cup Adam's Old Fashion Creamy Peanut Butter
3 tsp. vanilla extract
3 cups Quaker Oatmeal (1 minute kind)

Stir until blended. Spoon rounded teaspoon fulls onto wax paper.
Makes approximately 40-45 cookies.

Total Oil = 22 tsp.
Total Fat = 0
Total Chocolate = 9 tsp.

Per cookie (making 45 cookies):
Oil: 1/2 tsp.
Chocolate (approx. 1/4 tsp.)

August 1992

SWANK

MULTIPLE SCLEROSIS

NEWSLETTER



Edition #48

From the office of Roy L. Swank M.D., Ph.D.

Editor: Barbara Brewer Dugan

© 1992 Roy L. Swank M.D., Ph. D

ABOUT EARLY DIAGNOSIS

For the best results with low fat diet treatment for multiple sclerosis patients, the diagnosis must be made early and treatment started before disability develops. The urgency for early diagnosis has been stated many times in newsletters and in publications, but we have not described how the diagnosis can be made in time to assure the best possible result. I would like now to describe our approach to the problem.

The laboratory tests now available are both non-specific and insensitive. The shortcomings have already been discussed in a former newsletter (#30), but it might be added here that I advise against *spinal punctures* because they are often followed by an increase in old symptoms and frequently by new ones lasting up to 6 months. In addition, examination of spinal fluid is often not conclusive, particularly in early cases. *MRI scans* are of considerable help when positive, but in our experience they have often been negative (20-30%) in both early and late cases. The red cell mobility test which we use is negative in 10-15% of both early and late cases. It, like the MRI scan, is non-specific. At the present time, it is clear that we do not have a reliable or specific laboratory test for multiple sclerosis.

The diagnosis of early cases of MS is the real challenge. It makes early treatment with low fat diet possible, and there is a better than 90% chance of a good result. It is nice to have the support of an MRI scan or red blood cell mobility test, although the tests alone are inconclusive. A

good history and examination, however, are necessary and often conclusive alone, particularly in moderately to severely advanced cases.

Symptoms and signs which are readily recognized as neurological, such as loss of vision; double vision; paresis or paralysis of parts of the body; clear-cut, early demonstrable sensory changes; vertigo and ataxia are frequently the initial symptoms of MS. Except in rare instances, they are followed by periodic exacerbations leading to disability. A careful history, however, usually will reveal tell-tale symptoms suggesting earlier involvement of the nervous system. These earlier symptoms can only be obtained if the patient's memory is intact, or with the help of family members or friends.

The earlier symptoms to which I refer fall into two classes. The first consists of a group of symptoms for which objective signs are difficult to demonstrate, findings which suggest moderate to mild involvement of various neurological systems. For example, mild alteration of pain and temperature sensitivity, slightly blurred but not double vision, slight dimming of vision (described as looking through a fog), slight urgency and frequency of urination, focal or generalized weakness of the extremities, a tendency to stagger slightly when not concentrating on one's gait, and slight confusion and difficulty recalling words. These symptoms develop periodically and then disappear, and they are often brought on by fatigue, heat or stress. They are seldom confirmed on examination. They are usually accompanied by another set of symptoms now to be described.

Fatigue and easy fatigability in patients who previously were very

active (often athletic), *painful, aching muscles and joints*, particularly of the lower extremities and *general weakness* is the **core** of another very common symptom complex. In addition, these patients are usually very sensitive to heat or cold, they have cold hands and feet, and they often bruise easily and spontaneously.

The earlier symptoms and the core symptoms just referred to frequently precede the typical neurological symptoms and signs of MS. They may continue to be the only symptoms for years. These symptoms are not diagnostic of MS, but they are frequently forerunners of the disease. With support of either the MRI scan or the red cell mobility test, a diagnosis of MS is possible. The problem can then be discussed with the patient. Diet is suggested and is usually accepted by the patient. Without diet, in time the diagnosis becomes clear.

If both the MRI scan and the red cell mobility test are done, we have found that one or the other test is confirmatory of MS in 96% of cases. With this backing, it is possible to make a presumptive diagnosis early and start treatment. At that time, the problem is explained to the patient who, of course, must make the final decision concerning treatment.

ABOUT STRESS

On page 48 of *The Multiple Sclerosis Diet Book*, Swank and Dugan, 1987, and in our newsletters, we have described our increasing awareness of the relation of stress to aggravation of the disease. Short periods of

stress produce fatigue and mild symptoms difficult to discern, but prolonged stress often produces increased severity of old symptoms along with new symptoms, typical of an exacerbation of disease.

Patients not on diet are far more sensitive to stress than those who follow diet carefully. Patients on diet for more than 5 to 10 years are affected very little by stress except for the development of anxiety. They seldom note significant increases in their symptoms or the development of new symptoms.

It is of interest that early studies (Birchner and Simons, 1948; McAlpine, 1946; Plulippopoulous et al, 1958; Mertal et al, 1970 and others) suggested that stress frequently preceded exacerbations of MS. Their studies had little influence upon neurologists, most of whom expressed the opinion that stress did not influence the disease.

Recently, there has been renewed interest in stress as an aggravating cause of MS. Three published papers come to mind, one by Grant et al, 1989; another by Warren et al, 1982; and another by Franklin et al, 1988. These papers support the opinion expressed in our book, and in our newsletters, that stress aggravates MS, and is frequently followed by exacerbation of disease. Because of the close relationship of stress to aggravation of MS and occasionally to precipitation of the disease, we have concluded that there must be a causal relationship. For this reason we caution patients to avoid confrontations and other causes of stress. Whenever stress is imminent or in progress, mild sedation for sleep or nervousness can be very helpful.

ABOUT PREGNANCY & MAJORY SURGERY

We have stated in our newsletter (#9), and in The Multiple Sclerosis Diet Book, Swank and Dugan, 1987, (p. 51) that patients tend to do well during pregnancy, but following delivery they tend to have exacerbation of the disease. In a recent abstract (p.

237; Neurology 38, Suppl. 1: March 1988) Kathleen Brick et al, stated that most of their eight closely followed patients tended to improve during pregnancy, but that 6 of them experienced relapse within 7 weeks of delivery. In our much larger study of pregnancies we have estimated that 50% exacerbate postpartum, and that during pregnancy they tend to improve.

We have found that an infusion of 2 units of fresh frozen normal blood plasma or one unit of whole blood has prevented relapses of MS from occurring postpartum, provided the infusions were given immediately after delivery.

We recommend that patients with MS be on low fat diet at least one year, and preferably two or three years, prior to becoming pregnant.

We have also observed that exacerbation of disease tends to occur after operations done under general anesthesia. We have found that this does not occur if 2 units of fresh frozen normal plasma or 1 unit of normal whole blood are transfused immediately after the operation.

OFFICE TALK

NEWSLETTER SUBSCRIPTION

Don't forget it is time to subscribe to the Newsletter. We will be producing several issues this year. The subscription price is \$20.00. Those of you who are able to pay for the subscription will be helping us produce this informative publication for all.

Make checks payable to **O.H.S.U Foundation - Swank**. Please mark memo area on check "Newsletter". A receipt for your donation will be sent to you from the Foundation.

NEWSLETTER SETS AVAILABLE

Complete sets of the Swank Newsletter, dating back to 1977, are available. You might want to have a complete set in a notebook if you do not already have one. Many patients

refer to their newsletters frequently and often share them with friends. You might want to recommend the Newsletter Set to a friend or acquaintance with multiple sclerosis to have as their own reference guide.

Anyone wishing to obtain a copy should send a check for \$40 along with the mailing address and the set will be mailed out immediately. This includes a one year subscription to the Newsletter.

Make checks payable to **O.H.S.U. Foundation - Swank**. Please mark in memo area on check "Newsletter Set".

ANNOUNCEMENTS

SATURDAY, SEPTEMBER 26, 1992:

Please join the MS Society of Portland at the benefit dinner honoring Dr. Swank for his 44 years of dedication and service (see accompanying invitation). Keynote speaker will be **John McDougal** from St. Helena Hospital & Health Center. The Master of Ceremonies will be **Sharon Mitchell** from Portland's Channel 8 (NBC). **Donations will benefit the MS Society of Portland**. Patient tickets are \$35 per person, guest tickets are \$75 per person and \$25 is tax deductible. Special rates have been arranged at the Jantzen Beach Red Lion for those of you from out of town. Reservations must be made at the MS Society by September 10, 1992 and at the hotel by September 5, 1992. For information call (503) 249-0070.

NOVEMBER 2-6, 1992:

Dr. Swank will be a guest speaker at a four-day seminar, "The McDougall Multiple Sclerosis Program" at St. Helena Hospital & Health Center in the Napa Valley. Other speakers include Dr. McDougall, as well as a neurologist and a urologist. Additional activities include group interaction and cooking classes. Accommodations are provided by the Health Center. For information call 1-800-358-9195 outside California, 1-800-862-7575 inside California.

*The Multiple Sclerosis Society
of Portland, Oregon, Inc.
requests the pleasure of your company
at a Benefit Dinner to honor*

*Dr. Roy L. Swank
for his 44 years of dedication and service*

Saturday, September, 26, 1992

seven-thirty until ten-thirty

Jantzen Beach Red Lion

909 North Hayden Island Drive

Portland, Oregon

HOTEL PARKING

BLACK TIE OPTIONAL

Corporate Table Reservation: \$1,500 - table for 10
Please reserve _____ table(s)
List table guest on reverse side

Please make check payable to Multiple Sclerosis
Society of Portland, Oregon, Inc.
Amount _____

Guest Ticket: \$75 per person
Please reserve _____ non-vegetarian dinner(s)
Please reserve _____ vegetarian dinner(s)

Visa/Master Card Exp. Date

Signature

Patient Ticket: \$35 per person
Please reserve _____ non-vegetarian dinner(s)
Please reserve _____ vegetarian dinner(s)

Name _____

Address _____

City _____ State _____ Zip _____

Phone _____

I cannot attend the Benefit Dinner, but would like to
honor Dr. Swank. Please accept my tax deductible
donation.

For additional information call (503) 249-0070

- Price of tickets above \$25.00 is tax deductible -
- Donations will benefit the Portland MS Society -

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OREGON HEALTH SCIENCES UNIVERSITY
ROY L. SWANK, M.D., PH.D.
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3181 SW SAM JACKSON PARK ROAD
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CHEF'S CORNER

Banana Tea Bread

- 1 1/2 cups all-purpose flour
- 1 teaspoon baking soda
- 1/2 teaspoon salt
- 2 large - or 2 1/2 medium bananas (1 cup when mashed)
- 1/2 cup nonfat yogurt
- 1 cup sugar
- 2 eggs
- 1 teaspoon vanilla or 1/2 teaspoon lemon extract
- 1/2 cup oil
- 1/2 cup chopped nuts (optional)

Preheat oven to 350 F. Mix together flour, baking soda, and salt in large mixing bowl. Break peeled bananas in chunks and place in blender. Push down with rubber scraper. Cover and blend on Low a few seconds, then on High until mashed. Add yogurt, sugar, eggs, flavoring and oil. Cover; blend on High for 1/2 minute. Add nuts and blend on High briefly until nuts are coarsely chopped. Pour over flour mixture. Beat with mixer at low speed for 1/2 minute, scraping bowl, or mix by hand. Turn into oiled 8 1/2" x 4 1/2" x 2 1/2" loaf pan. Bake for 1 hour, or until done when tested with a toothpick. Yields 1 loaf (16 slices per loaf).

Fat: Total - 2 teaspoons; per slice - scant 1/6 teaspoon
Oil: Total - 24 teaspoons (36 teaspoons if nuts are used);
per slice - 1 1/2 teaspoons (2 1/4 teaspoons if nuts
are used)

CHICKEN AND PASTA SALAD

- 2 chicken breasts, skinned and boned
- 1 cup slated chicken stock or bouillon
- 1/4 cup dry white wine
- 3/4 pounded pasta bows or medium-sized conchiglie

Garlic Mayonnaise

- 1 cup coarsely chopped cooked green beans
 - 1 cup cherry tomatoes
 - 1 cup coarsely chopped celery
 - 4 green onions, coarsely chopped
 - 1/2 cup coarsely chopped pitted black olives
 - 1/4 cup toasted pine nuts or blanched almonds
- Salt to taste

Prepare chicken. Gently cook chicken breasts in stock and wine until tender. Chop coarsely. Cook pasta in rapidly boiling salted water. Drain and cool.

Garlic Mayonnaise

In blender or food processor mix 2 egg yolks, 4 garlic cloves, 1/4 cup lemon juice, 2 teaspoons Dijon mustard, and a pinch each of salt and pepper. With motor running slowly, drizzle 1 1/2 cups oil to make a thin sauce. Yields 1 pint.

Two cups commercial mayonnaise may be used with just garlic and Dijon mustard added to it. This will reduce amount of oil in recipe by half.

Set aside 1 tablespoon of each vegetable for garnish. Mix all remaining ingredients in large bowl with chicken and pasta. Add mayonnaise to taste and toss gently. (There will be extra mayonnaise. Add as necessary if salad is kept for several days). Salt to taste. Serves 6.

SWANK MULTIPLE SCLEROSIS NEWSLETTER



November 1992

From the office of Roy L. Swank M.D., Ph.D.
Editor: Barbara Brewer Dugan

Edition #49

THE 1ST APPOINTMENT

In previous newsletters we have discussed various situations harmful to MS patients. These included discussions on the effects of trauma, nervous tension, sensitivity to heat, and sensitivity to excess physical and mental activity. The goal of this issue is to outline our general method of treatment of patients when first seen in our MS clinic.

Initial treatment consists of getting acquainted with the patient and learning as much as possible about his or her life style. Usually patients have experienced one or more exacerbations followed by remission which a variable recovery has occurred. The immediate family and extended family are included in the initial assessment of the patient to establish problems or issues that may be faced. The discussion is conducted slowly and considerable time is given to the patient. Included in these discussions are the nutritional and geographic background.

A standard neurological examination follows which includes temporal vision (Flicker-fusion test of both eyes), and a balance test (both eyes open and closed) which is a refined Romberg Test. This test measures the movement in centimeters (2.5 centimeters/inch) of the patient standing erect on a platform raised one inch above the floor. These tests are repeated at each visit. They are extremely helpful in evaluating the progress of the disease.

The confirmatory tests used are the MRI and the Red Cell Mobility test. We have found that the MRI, which is usually done prior to the appointment, can be negative in a significant number of MS cases. Exacerbations once seen, can in a relative short amount of time, disappear and not be seen in subsequent MRI's. The Red Cell Mobility test is approximately 90% accurate in confirming MS and is nonspecific, as is the MRI. When both are confirmatory of MS

our figures show that the confirmation is correct in 96% of cases.

A spinal fluid examination is not done for two reasons. First, negative tests may be present in as many as 50% of patients in early phases of the disease. Secondly, an increase of patient symptoms may follow the procedure. We usually do not do the evoked potential tests.

I am particularly interested in the early history of MS in patients, this includes what I have described as prodromata of the disease (see Newsletter #46). If patients have experienced one or more exacerbations and have made very good recoveries, we have found that they do exceedingly well on low-fat-diet. The diet must be followed closely without interruption, even for short periods. The Montreal studies have shown that early cases have a better than 90% chance of avoiding disability during their lifetime (Swank, R.L., Grimsgaard A., *AM. J. Clin Nutr.* 1988;48:1387-93). Regardless of the level of disability, all patients are placed on a low-fat diet and are followed the same way. In moderately or severely disabled patients the diet stops exacerbations of the disease. The rate of progress of the disease and death rates are decidedly better in those patients who follow the diet carefully.

Patients are seen two to three times during their first year to assess their condition and check their low-fat diet. Following this, we see patients annually.

It should be evident to the reader why we place so much importance on an early diagnosis. It is then possible to prevent the patient from disability. In our Montreal group of patients, this was for a 34 year period, death occurred in only 5% of the early detected patients. In the same early cases not on diet, 80% died during the 34 year experimental period.

To make a diagnosis early it is necessary to closely inquire into the earliest symptoms, into the prodromata of the disease. These symptoms can only alert the exam-

iner to the possibility of MS, and lead to appropriate testing and follow-up.

We have often mentioned plasma infusions, but we have not described when or why they are given. The following are the reasons for the use of plasma in the treatment of MS: **FIRST**, in cases who have severe exacerbations that result in the inability to work or care for themselves. This group of patients respond quickly to plasma infusions and are able to control the disease with plasma until the low fat diet is effective (1-3 years)¹. **SECONDLY**, plasma is given for spontaneous exacerbations² caused by trauma, catastrophic life events or possibly over exposure to heat. **THIRD**, working patients have plasma due to increased fatigue and the demands of full-time employment. This group of patients may require a periodic infusion or more routinely on a maintenance bases. Working patients are able to continue working as a result of the infusions. The energy level is improved as well as clarity of thought.

Objective testing (flicker fusion and balance) done prior to the plasma infusion usually shows a decline in the patients scores. One week following the infusion, the objective scores improve and remain steady until fatigue once again is present.

The protocol to follow in general is as follows: Early cases experiencing exacerbations caused by trauma etc... Are given 2 units of fresh frozen plasma (FFP), followed by another 2 unity 5-9 days later. The patient is premedicated with 50 mg. Benadryl prior to each infusion at the following times, the night before the infusion, the day of the infusion, immediately after the infusion and the day following the infusion.

The infusion may be repeated if necessary in one month if symptoms do not begin to remit. However, stabilization usually begins following the first series.

Temporary intensification of symptoms may be present following the first 2 units of FFP. Results are usually not noted until the

second 2 units of FFP are administered.

Working patients usually receive 2 units of FFP, followed one week later with an additional 2 units (2+2). This may be repeated every 3 months.

Another group of patients find more benefit in receiving 2 units every month for a period of several months and then breaking for a few months. (Maintenance)

All risk factors must be discussed carefully with the patient before the treatment begins.

Patients entering the infusion program are requested to select two donors with the same blood type and Rh factor. Patients are informed that donor participation is for one year and cannot be changed. This reduces the risk of transmissible diseases through the blood. All donors are carefully pre-screened by the American Red Cross for Hepatitis and the HIV virus.

- do patients have to be on LFD for 1-2 years before plasma?
- how about pregnancy?

LET RUMORS EXPIRE

We have been told by patients that I no longer take new patients and that I plan to close the Swank MS Clinic soon. Neither rumor is true. I plan to continue with the clinic as long as it is financially feasible to do so. Furthermore, we have not stopped taking new patients and do not plan to do so. In the past year, we have seen 2 to 3 new patients each week; which is about all that we can accommodate along with the many patients that we continue to follow regularly. We are presently booked one year in advance for new patients.

BLADDER PROBLEMS

Many patients periodically experience problems with urination. This may be urinary retention, urgency, frequency, stress incontinence or even total incontinence.

An understanding of the bladder and how it functions or does not function may help you in controlling any of these problems.

The urinary bladder is a hollow, muscular organ that collects urine and excretes it through the urethra. The amount of urine collected in the bladder varies with individuals and age, but normally the need to urinate is felt after accumulation of 250-

+50 ml of urine. The normal output of urine daily for adults is approximately 1500 ml.

The process by which you are alerted to the need to urinate is as follows. Urine collects in the bladder until 250-450 ml. has accumulated. Pressure in the bladder then stimulates nerve endings (stretch receptors) which transmit impulses to the spinal cord to the voiding reflex center. This center is located at the level of the second to fourth sacral vertebrae. Some reflexes will continue up the spinal cord to the voiding control center located in the cerebral cortex.

If conditions are right to urinate the brain will then send a message or impulse through the spinal cord to motor neurons in the sacral area causing stimulation of the parasympathetic nerves.

When all of this has been accomplished urine can be eliminated from the bladder. The final act of elimination is controlled by the external urinary sphincter. If all conditions are appropriate for urination the conscious portion of the brain relaxes the sphincter muscle and urination happens. This process is continuously repeated upon the bladder filling to the necessary 250-450 ml.

Here is where the trouble lies. Voluntary control of urination can only happen if the nerves supply the bladder, urethra, neural tracts the cord and brain and the motor area of the cerebrum and all are working properly. You must be able to sense your bladder is full. Injury to any part of the nervous system controlling urination will result in involuntary emptying of the bladder. If for instance, if you have sustained injury above the level of the sacral region in the spinal cord urination would be impaired.

RETENTION - Some patients are unable to void although the bladder contains an excessive amount of urine. This can be due to interruption of the pathway described earlier or possibly by infection or trauma to the bladder. When this occurs stagnation of urine increase the chances of urinary tract infection. Bladder distention causes reduced blood flow to the bladder and tissues making it less resistant to infection.

The reduced blood flow more than stagnation of the urine is the key to urinary infection. The symptoms to watch for are: Discomfort in the pubic area, bladder swelling (distention), unable to void or

frequent voiding of small amounts. If you think you are experiencing any of these symptoms contact your physician. It may be necessary to catheterize the patient to empty the bladder.

FREQUENCY of urination is urination at frequent intervals that is more often than usual. Frequency without an increase in fluid intake may be a sign of an inflamed bladder (cystitis). The total amount of urine may be the same but the frequency of urination increases.

URGENCY is the feeling that you must void NOW. The bladder may or may not be full, but the patient will feel as though they must empty their bladder immediately. This type of symptom is usually noticed under stress or when the bladder is irritated. It may be present if there is poor external sphincter control.

DYSURIA is painful urination. Burning following urination is a sign of a bladder infection. Burning during urination is usually a sign of an irritated urethra (small tube extending from the bladder to the urinary opening). The burning can be very painful. If these symptoms are present contact your physician for further examination into the problem.

URINARY INCONTINENCE - Total incontinence is usually a symptom of MS. It can be stress, urge, functional or even reflex incontinence. Total incontinence is unpredictable and involves a total loss of urine. Causes may be injury to the external urinary sphincter or neurologic disease.

STRESS INCONTINENCE is usually experienced when one coughs, sneezes, or laughs. A small amount of urine is expelled from the bladder. This is usually a result of trauma, loss of tissue tone or even aging.

FUNCTIONAL INCONTINENCE is the involuntary, unpredictable passage of urine. It is usually a result of the disease. Functional incontinence may be present during an exacerbation of the illness and then improve as the exacerbation subsides. Placement of an indwelling catheter is discouraged since improvement of bladder functioning usually occurs. It may be necessary to do self straight catheterization 2-3 times daily until bladder function returns. This procedure can be taught by a visiting nurse or a nurse in your physician's office.

Urinary tract infections may be **ASYMPTOMATIC**. Symptoms or not, it can exacerbate your illness. A slight elevation in temperature or any of the above symp-



Dear Patients,

We would like to thank all of you who generously donated to our research. The Clinic will remain open, but we are not in a position at this time to know how long. We are continuing to see new patients and are presently booked nearly a year in advance.

The New Year holds promise for our research and we look forward with optimism to an ongoing M.S. Clinic.

Barbara D. Dugan

Roy L. Swank

RESEARCH FUNDING

To remind you of our increasing need for research funding, we are inserting this form to be completed when donating money for research.
Thank you.

MAIL TO:

Roy L. Swank, M.D., Ph.D.
Swank MS Clinic - MP140
3131 SW Sam Jackson Park Road
Portland, OR 97201

CONTRIBUTOR'S NAME:

ADDRESS:

AMOUNT OF DONATION:

Make Checks Payable to:
OHSU Foundation
Swank M.S. Research

toms outlined should not be ignored.

PREVENTION: It is very important to maintain adequate fluid intake. Remember your bladder needs fluid to initiate the voiding reflex. Restricting fluids to avoid urination weakens this reflex. Holding urine increases the time in the bladder and allows bacteria to accumulate. If you have difficulty with the need to urinate at night drink all fluids during the early part of the day and restrict intake after 5:00 pm.

Bacteria can be introduced during sexual intercourse, therefore, women are advised to urinate before intercourse and immediately following. Also, drink a large glass of water following intercourse to increase urination.

Don't forget to take Vitamin C, 1,000 mgs. to prevent growth of bacteria in the bladder.

Remember a healthy bladder is a functional bladder.

Barbara Brewer Dugan

OFFICE NEWS

New Rule Regarding Diet: All products labeled non-fat must be counted as 1 gram of saturated fat per serving. The FDA allows labeling to read 0 even when it contains .9 gram of fat.

The MS Society of Portland Oregon now has loaner medical equipment available. For more information contact Candyce Hayes at 249-0070.

AMIGO Standard, battery powered wheelchair. Little use. Paid over \$2,000. Will sell for \$1,250 or best offer. Call 646-4909 for more information.

SWANK DINNER

The Swank Dinner was a wonderful success, we would like to thank everyone who generously volunteered their time and effort. Thank you to Cascade Piano Co., Farmers Insurance Group, New England Life - Craig Byrd Agency, NW Magnetic Imaging, Trillium Health Products, Standard Insurance Co., MS Foundation, Inc. - Florida, Bluecross/Blueshield, Michael Butler, US Bank, Bob's Red Mill, Fred Meyer, Inc. A special thank you to John McDougall our guest speaker, Sharon Mitchell from KGW, Candyce Hayes - Director of the MS Society of Portland Oregon, Inc., Linda Roth and all the Board Members.

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3181 SW SAM JACKSON PARK ROAD
PORTLAND, OR 97201

CHEF'S CORNER

FAT FREE CHOCOLATE CAKE

1 1/4 cups flour
1/3 cup unsweetened cocoa
1/4 cup corn starch
1 teaspoon baking powder
1/2 teaspoon baking soda
1/2 teaspoon salt
1 1/4 cups sugar
1 cup water
3 egg whites
1/2 cup light or dark corn syrup
confectioners sugar (optional)

Spray 9-inch square baking pan with cooking spray. In large bowl combine next six ingredients. In medium bowl stir sugar and water until sugar is almost dissolved. Add egg whites and corn syrup; stir until blended. Gradually add to dry ingredients, stirring until smooth. Pour into prepared pan. Bake at 350 degrees for 35 minutes until toothpick inserted in center comes clean. Cool in pan on wire rack. If desired, sprinkle with confectioners sugar. Makes 16 servings.

Fat = 0
Cholesterol = 0
Calories = 140

BARBEQUED TURKEY (LIKE CHINESE BBQ PORK APPETIZER)

2 lb. turkey breast, skinned
2 cl. garlic crushed
4 t. sugar
2 t. salt
4 t. white wine
1/2 t. ginger
6 T. soy sauce
1/3 cups Karyo syrup
small amount red food color

Combine ingredients, and pour over meat. Marinate 1-2 days. Bake at 325 for one hour, in the marinade, basting a couple of times. Cool. Slice thin, and serve with hot mustard and sesame seeds.