# SWANK Multiple Sclerosis Newsletter

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

February 1994 Edition #60


## Sexual Concerns

A common concern of many MS patients is periodic or permanent decline in sexual ability and interest. Fluctuations in sexual drive are experienced by many people, but for MS patients these periods last longer and recovery is less rewarding. Fatigue and exhaustion are common causes of temporary loss of sex interest. Rest and relaxation are important alleviating factors.

Sexual dysfunction in men is apt to be more serious than in women. When due to lesions in the lower end of the spinal cord, the ability to attain penile erection can be permanently lost.

In women decreased vaginal lubrication and sensitivity may lead to difficulty having an orgasm.

Low blood pressure from medication, sedation, and alcohol are particularly harmful to men, whereas fatigue and weakness and psychological problems are problems for both sexes.

Although the problem is on going and serious, there are a number of things which can be done to alleviate it.

Evaluation by your primary physician and urologist may lead to successful treatment with drugs such as Yocan ( yohimbine) a vasodilator with aphrodisiac effects, or testosterone for sublingual, transdermal patch, or intra muscular injections. Halotestin is available for oral administration. None of the testosterone products should be used in men with cancer of the prostate.

Papaverine, a vasoactive medication, has been successful in some men with erectile dysfunction. Injections into and near the base of the penis with a small gauge needle produces and erection in 15-30 minutes that my last up to several hours. The dosage is regulated on an individual basis to prevent long painful priapism which can be uncomfortable. Treatment has not proven effective in men with severe vascular problems.

There are devices available that have been successful for male patients when medication has failed.

Penile implants have been available for years. The type of implant depends on the patient's physical needs. The surgery can be performed on an out patient basis. The recovery from the operation may take 6-8 weeks. This procedure will produce adequate permanent erection. It does not restore ejaculation.

Suction devices have been successful and do not require surgery. The suction device surrounds the penis. A vacuum is produced which draws blood into the penis. A ring around the base of the penis contracts trapping the blood, which maintains the erection. This device may be used in conjunction with other therapies.

## Future Clinic News

**We are pleased to introduce Florence Monfore to you. She is being retained to assist in all financial and organizational planning for the future of the Swank MS Clinic. More will be revealed by letter in a few weeks.**

# Tremors

There are two main types of tremors, those at rest, and those seen only during movement.

Rest tremors develop when, for example, a hand or arm is allowed to rest free of muscular tension. Then a rhymic gross tremor. Characteristic of the disease parkinsonism begins, and continues until the hand or arm is voluntarily moved. When completely relaxed, for example when asleep, a rest tremor may slowly and eventually stop.

On the other hand, intention or movement tremors are absent in Multiple Sclerosis during resting. As soon as a movement is initiated a rhythmic tremor begins. For example, in and attempt to touch ones nose, or drink a glass of water, the shaking begins with initiation of movement and intensifies as the movement nears completion. This makes drinking water from a glass without spillage difficult. The upper extremities excluding the shoulder are most likely to be involved first, and in MS the tremor can be more marked, or exclusively present on one side.

Treatment medically for intention tremors is disappointing. Some benefit is derived from mild sedation. However, with time the tremor can become uncontrollable and at this point, the tremor can be controlled by and operation called thalamotomy. This consists of destruction of a very small nucleus in the thalamus. When successful the shaking of the upper extremity stops or nearly stops so that the patient can again control and use the arm and hand. As a rule the arm is slightly or moderately weakened by the operation, but not sufficiently to prevent its usefulness.

Intention tremors can also occur in the absence of MS. Familial tremors are fairly common. They can occur at any age, but usually appear in mid-life. They usually start as a fine tremor of the extended fingers and progress slowly to involve shaking of the head and then of the body. These tremors are usually mild, but may become somewhat violet with ageing.

In general intention tremors are intensified by nervousness and fatigue. Mild sedation may reduce their intensity. There are of course many people without MS who develop an intention tremor of extended fingers when nervous or tired. The tremor is usually fine and disappears with relaxation. These tremors respond to mild sedation, they are bilateral, and they usually do not lead to disability.

# Dental Work

Operative procedures, particularly when performed under general anesthesia, are frequently followed by exacerbation of multiple sclerosis. This can lead to increased disability.

Dental work may also be followed by similar aggravation of the disease. Our first impression was the increase in symptoms was due to nervousness and agitation due to the length of appointment or the extent of dental work. However, when patients were sedated so that they slept well the night before and were calm preceding the dental work, a majority of patients continued to suffer aggravation of their disease.

A series of early experiments done by Swank demonstrated that adrenalin causes marked aggravation of platelet and leukocytes in the blood which were both numerous and capable of temporarily occluding smaller arteries (arterioles) and capillaries. (1) Serotonin in very small amounts caused similar aggravation. When injected into arteries supplying the brain with blood, the blood flow critically slowed causing break down of the "blood brain barrier." This allowed "toxic" materials to escape through the blood vessel walls to the brain. (2)

We are tempted to suggest that the adrenalin introduced with the novocaine into the jaw to stop or prevent pain during dental work could get into the general circulation where it causes aggravation of platelets and leucocytes. The "blood brain barrier" would be damaged, allowing toxic substances into the circulation to escape to the brain tissues thereby causing aggravation of the disease.

It is our suggestion that you discuss your appointment ahead of time with your dentist. There are other anesthesias that do not contain adrenalin that may be used.

1. Swank, R.L. and W. Hissen. Influence of serotonin on cerebral circulation. Arch. Neurol., 10: 468-472, 1964.

2. Swank, R.L. and J.H. Fellman. Blood cell aggregation and biological agents. Presented to 4th Europ. Conf. Microcirc., Cambridge, 1966. Bibl. Anat., 9: 98-103, 1967.

# A Poem

## That Wonderful Thing

*You can go forward or you can go back.*
*You can imagine a sky blue or black.*
*You can be vital, alert or depressed.*
*Are you expecting the worst or the best?*
*Yours is the choice. You decide what you'll be;*
*What kind of a person the others will see.*
*You manage the show; to yourself you assign.*
*The roll you will play. You can fade out or shine.*
*Fate is a myth, neither hostile nor kind.*
*It's all in that wonderful thing called the mind.*

*Until next time,*
*I remain yours in health,*
*John*

# Recipes

## Fabulous Chocolite Cake

Preheat oven to 350 degrees
In a small bowl, mix the following:
1 cup sifted cake flour
1 tsp. each baking powder and baking soda
In large mixing bowl, beat:
1/3 cup chocolate syrup
6 large egg whites
1 cup firmly packed brown sugar
1 cup unflavored nonfat yogurt
1 tsp. vanilla

Stir flour mixture into liquids and beat until evenly moistened. Pour batter into a non-stick or sprayed 8" or 9" baking cake pan (ring form pan works nicely.) Bake for approximately 40-45 minutes until knife inserted comes out clean. Let cake cool approximately 15 minutes before inverting onto serving plate. Tastes great with a light sprinkling of powdered sugar. If doubled recipe will yield (a two layer cake.)

## Crock-Pot Macaroni 'N Cheese

4-5 cups (dried) macaroni, cooked and drained
2-3 TBS oil
1 12oz can evaporated skim milk
1 1/2 cups skim milk
3 cups shredded nonfat processed cheese (3 Alpine Lace or 2 Healthy Choice)
3/4 - 1 cup chopped or mined onion

Toss cooked macaroni in 2 TBS oil. All remaining ingredients. Pour into lightly greased Crock-Pot. Stir well. Cover and cook on low 2-3 hours. Stir occasionally.

To reheat leftovers:

Place leftovers in an oven safe glass baking dish, cover with wheat germ, cracker or bread crumbs and reheat at 350 degrees for about 45 min-1 hour. This will brown the top and give it a nice crunchy top. If cooking time is shorter, brown in the oven for approx. 20-30 min then place in microwave for 4-6 min., depending on desired temperature.

## Pasta With Awesome Sauce

1 yellow or white onion, sliced and/or chopped
2 cloves garlic, chopped
1 TB. Canola oil
2 (14 1/2 oz) cans stewed Italian tomatoes with basil and oregano
1 TB dried, crushed oregano leaves
1 TB dried, crushed basil leaves
1 1/2 TB honey
1 1/2 TB balsamic vinegar
1 TB cornstarch
2 TB water
3/4 lb. uncooked pasta (shells, elbows, etc.)

### Pasta Noodles

Set pan on stove and heat toward boiling.

Before combining tomato mixture in pan, add pasta to pan with boiling water to begin cooking (approx. 10-12 minutes)

### Pasta Sauce

In a medium saucepan on medium heat, combine oil, onion and garlic; cook, stirring occasionally until onion is translucent (about 5 minutes), adding 1 or 2 TB of water as necessary to avoid sticking. Add tomatoes, oregano and basil; stir together and cook for about 5 minutes. Remove pan from heat for 1 or 2 minutes. Put saucepan contents into a food processor (or blender) and pulse a few times to chop tomatoes and onions slightly and combine all ingredients. Pour back into the saucepan, add honey and balsamic vinegar; Bring to a gently boil. While mixture is heating, combine cornstarch and water in a small bowl; once boiling gently, pour cornstarch mixture into pan and stir until combine and sauce is thickened slightly. Once noodles are completed cooking, drain colander and pour into pasta bowl; Top with pasta sauce, mix together and ENJOY.

*note: This makes a great Pasta Primaver-just chop and saute fresh veggies in a little water or wine (in a non-stick frying pan); add to the sauce right before adding the cornstarch.*

Serves 2-4, depending on appetites.

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Editor: Barbara Brewer Dugan RN

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## Exacerbations

As we prepare to move to our new quarters, it is appropriate to talk in this newsletter about fluctuations in activity of Multiple Sclerosis; What causes it, and how to reduce the resulting damage. Newsletter #41, dated September 1990, indicated that as early as 1953 we reported a marked reduction in frequency of exacerbations when patients were placed on and consumed the low fat diet. Prior to dieting, the average number of exacerbations was one per year.

In 118 patients who followed diet, the rate dropped 70% the first year, and thereafter, an additional 5% per year to reach a near 95% reduction in 6 years. This is shown graphically in Newsletter #41 and in Figure 1 of paper by Swank and Grimsgaard (1988) and Figure 1 of paper by Swank (1991).

The best way to neutralize the destructive effects of M.S. attacks is to follow the low fat diet carefully, in which case you will have none or a few mild exacerbations. In other words, you will reduce the exacerbation rate by 70% the first year, and eventually by 95% (from 1/year to 1/20 years).

Despite the best intentions and the low fat diet, there are a few circumstances which are attended by intensification of symptoms and occasionally by new symptoms. These are excessive physical exertion, excessive psychological stress, accidents and intensive body heat, including fevers from infections or disease and exposure to heat from bathing or hot weather. If any of these stress factors is short lived or not intense, patients will suffer only a temporary increase in fatigue and mild appearance of symptoms thought to be no longer present. If on the other hand, the stress is prolonged and allowed freedom of action the symptoms will become severe and constitute an exacerbation. It is definitely my opinion that stress, if not controlled, can lead to and cause an exacerbation.

Whenever the feeling of well-being begins to wane, and the stress begins to wear on one, counter measures should be taken. Removing the stress or neutralizing it should be done immediately. For example, if one had been physically working too hard, a rest is in order. If the stress is in the home, it should be reduced or removed if possible. If nothing can be done to reduce psychological stress, mild sedation is helpful. Bed rest twice daily for one hour, or a change of the environment by a vacation in a pleasant surroundings is in order. If unable to sleep, a sleeping medicine is strongly advised. Elevated body temperature from fever or exposure to hot weather or hot water must be countered immediately.

Psychological stresses such as loss, or the threat of loss of emotional or financial security (loss of employment by men or single mothers) is probably one of the most severe stresses. The sudden rejection by ones partner is another very severe stress. Deaths in the family of loved ones, lacks the pain of rejection, and is usually recovered from quickly except where children are involved. Overwork usually causes fatigue or exhaustion which forces one to rest. If the danger of the exhaustion is recognized and the patient can sleep and rest mid-day, spontaneous recovery and wisdom is gained. Accidents, especially automobile accidents, are often followed by an increase in anxiety and subsequently by surfacing of evidences of activity of disease. How far this progresses is determined by the effectiveness of the neutralizing measures which are taken, i.e. rest, sedation, settlement of claims and legal proceedings, successful treatment of infection, i.e. bladder, or urinary infections, are also followed by quick recovery.

So far this message has spoken loosely of activity of the disease, leaving it to each of you to determine what is meant. Activity of MS can be broken down or divided into several categories, such as mild, moderate, or severe. Mild activity is often thought of as a fluctuation of disease, whereas moderate and severe activity are considered exacerbations, either mild or severe. Patients on diet seldom suffer from severe, especially progressive exacerbations.

Fluctuation usually consist of reappearance of symptoms during stress, heat, or after an accident. Fatigue often precedes these symptoms. The reappearing symptoms often consist of graying of vision, blurred or diplopia, sensory alterations but little loss of sensations, urinary frequency and general weakness. Ataxia or loss of balance is often among the reappearing symptoms. All are mild and fail to be easily recognized by the physician and are hence considered to be psychological. These symptoms come and go until after two to four years on diet. Then they fail to return and patients feel very much better.

<u>During this entire period of stress and especially from the very beginning, the low fat diet must be adhered to carefully.</u>

The trauma of operative proce-

dure, childbirth, and accidental trauma, must also be considered. In addition to other measures already mentioned, intravenous plasma (2 units) whole blood (1 unit) may be needed. These measures have been discussed in former newsletters in detail and in the book by myself and Barbara Dugan "The MS Diet Book".

We have also cautioned patients who plan dental work, that they should inform the dentist that adrenaline or other catecholamines must be excluded from anesthetics to be injected.

## Seasonal Change - Be Prepared

A change in season is upon us. It is getting warmer and will at times be very warm to hot. Those of you who are sensitive to heat, bear this in mind and be prepared. If overheated, you must immediately cool yourself. Get into an air conditioned space. If in the sun, seek shade and other means to cool yourself. Cold water, if available is ideal for soaking your hands and feet for 10 to 15 minutes. This will be followed by an immediate shift of blood from the skin of your entire body to deeper areas of the body, muscles and brain and spinal cord. Because of overheating this blood has been reflexly shifted to the skin to be cooled by radiation of the excess heat. The cooled blood flowing in the hands and feet will return to deeper structures, both cooling and increasing their functional capacity.

Cooling of the body can also be done by air conditioning or by swimming. These methods are very effective. Other easily effective methods of cooling include misting oneself, having available ice water while traveling so that hands can be repeatedly soaked. If weakened by infection and fever an additional method is to cover the patient with a cool wet sheet as well as periodically sponging the patients. Aspirin and other medications may help but if necessary use the methods described above.

The refrigerated jacket that has been developed to maintain the cool of patients would be very helpful for wheel chair or bed patients, but would severely limit ambulation in more active patients.

## Early Evidence Of Multiple Sclerosis

There are two different types of involvement of the lower extremities which tend to remit (recover) if treated promptly. Mild sensory involvement consists of tingling, numbness, burning, or vague changes. The patient can easily identify pain or light touch despite that all sensory responses feel abnormal. These early changes can involve the feet first and then ascend to involve the leg and thigh to the lower abdomen. At some point, and usually at the very beginning, a band of numbness, feeling of pressure or vague unpleasantness around the abdomen like a belt is also present. Accompanying these symptoms, loss of skin sensitivity of the genitalia, is often present.

Similar sensations may involve the upper extremities simultaneously or independently.

Early motor changes consist primarily of a feeling of weakness, accompanied by easy fatigability and weakness when walking or climbing stairs. This weakness is primarily a loss of endurance, which is temporarily restored by resting. These symptoms may not be accompanied by unusual tendon reflex changes or by extensor plantar responses; but they are recognized by the patient because his walking has become restricted.

The sensory and motor symptoms just described are often very early evidence of involvement of the nervous system by multiple sclerosis. Proper rest and the Swank low fat diet will usually abolish partly or totally these symptoms, and restore a modicum of strength. Exercise to strengthen the weak muscles will not restore strength and endurance, but will increase the weakness. It is important that the patient continue mild exercise, and stop and rest when fatigue either appears or increases. Heavy exercise and reprisal fatigue also cause the sensory symptoms to increase.

When definite neurological symptoms such as chronic hyperactive tendon reflexes and an extensor plantar have been present for some time (months or years), one should expect no more than stabilization of the disability.

In order to be free of significant disability for the rest of ones normal lifetime the diagnosis must be made early and the following treatment started immediately; the Swank low fat diet, rest mid-day as well as at night, freedom from upsetting stress, family support, and moderate exercise of one's choice with avoidance of fatigue.

## Let's Talk About Diet

Many patients have requested a list of new non-fat products available. Because these products are processed it is our feeling that they should be used in only limited amounts. The Swank low fat diet is a natural diet void of most processed foods. To produce a list of processed foods appears as though we are promoting the use of these products.

The success of the low fat diet is based on the original diet developed in 1948. At that time processed foods were available in only limited amounts. To add a number of these products to the diet could alter long term results.

If a product is labeled non-fat and is not included in the original Sw[illegible] diet count each serving as 1 gram [illegible] saturated fat. The use of these products should be limited to two servings per day.

ANEMIA: Occasionally a patient may develop low iron counts due to inadequate intake of iron rich foods or heavy menstrual periods. Reduced levels of iron contributes to increased fatigue. The annual blood chemistry requested by our office on all patients includes a hematology report that reflects RBC hemoglobin and hematocrit levels.

The following foods are rich in iron and we suggest they be included in your diet. Also, a multiple vitamin containing iron aids in prevention of iron deficiency.

Iron Rich Foods:

Fortified cereals
Apricots
Brewers yeast
Green leafy vegetables
Eggs
Legumes
Nuts
Sunflower seeds
Wheat germ
Whole germ products

## Calcium

you getting enough calcium? If you are excluding dairy products and are reluctant to eat greens high in calcium you may be deficient.

Adequate intake of this mineral is important for maintaining bone strength and preventing fractures. The recommended daily allowance for calcium is 800 mg per day for healthy adults.

It would be difficult for women to eat enough greens without the addition of dairy products to maintain adequate calcium intake. Calcium supplements can reduce bone loss and should be taken if your diet is deficient in these areas.

For patients following low-fat diet it is recommended that 2 servings of dairy per day and a minimum of 2-3 cups of greens containing high calcium be eaten.

If this is not possible a supplement of 800 mg plus a multiple vitamin is recommended. For older adults at risk for fracture 1000-1200 mg daily is recommended.

The following foods are rich in ...um:

- Almonds
- Brewers yeast
- Broccoli
- Dark green leafy vegetables
- Kale
- Beets
- Turnips
- Collard & mustard greens
- Filberts
- Milk and most dairy products
- Salmon
- Soybeans
- Tempeh
- Tofu
- Watercress

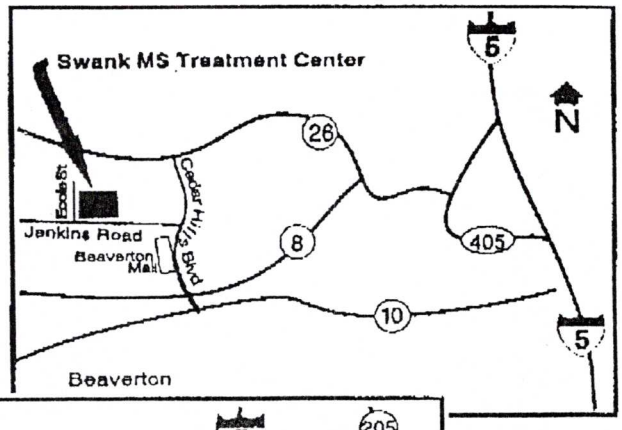
## Roy L. Swank Foundation

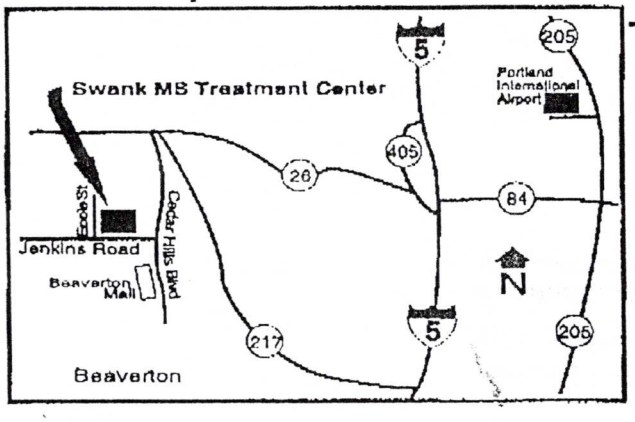
The Roy L. Swank Foundation has been formed as a nonprofit charitable organization for the future of the clinic. We sincerely appreciate your donations and apologize for the delay in acknowledging your contributions. If you have questions ...arding the foundation please ...tact the foundation toll free number 1-800-482-8487.

Florence Swank Jones

## Clinic Future

Please mark your calendars for the **new location of the Swank Multiple Sclerosis Treatment Center.** Our move will be effective August 1, 1994. The new address will be 13655 SW Jenkins Rd., Beaverton, Oregon. The new telephone service will be placed prior to the move and we will notify all patients of the change. Watch your newsletters carefully.

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# Recipes

## Non-Fat Cheesecake

**Pie Crust**

1 3/4 cups gram cracker crumbs (12)
1/4 cup sugar
1/2 tsp. nutmeg
1/3 cup + 2 TBS. oil

Mix dry ingredients together, add oil and mix very well. Press on bottom and sides of 8" spring form pan or 9" square pan.

Preheat oven to 350 degrees

**Filling**

24oz (2 large packages) non-fat cream cheese
2 tsp. vanilla extract
2 TBS. butter flavoring

Mix well in large bowl on high speed with electric mixer

Add 2 containers Egg Beaters (= 4 eggs) one at a time, mixing well with electric mixer.

Add 1 cup non-fat sour cream, blend in with wire whip.

Pour into prepared pie crust bake on middle rack for 60 minutes until center is set (check for doneness in 40 minutes). Do not overcook or the texture loses its smoothness. Turn oven off and with oven door ajar leave in for one hour. Remove and cool completely. (4 hours or overnight).

Top with any berry glaze you wish or cherry pie filling etc., Serves 8.

Tips for saving a mess: Place gram crackers in a ziploc and pulverize with a rolling pin.

Fat: 1.5 grams total
Per serving-scant
Oil: 21 tsp
Per serving 3 tsp

## Baking Powder Biscuits

2 cups **sifted** flower
1 tsp. salt
1 tsp. butter flavor
1 1/2 TBS. baking powder
6 TBS. oil
3/4 cup milk

Preheat oven to 450 degrees sift flour, salt and baking powder together twice. Place in bowl. Mix oil, milk and butter flavor. Add to flour mixture stir quickly until just mixed. Turn on lightly floured board. Pat out to 1/2" thickness cut into rounds. Place on ungreased baking dish. Place so they just touch. Bake 10-12 minuets until golden brown.

Yields 12 Biscuits

**Variations**

1. Mix 2/3 cups sugar with zest of one orange and juice to slightly moisten sugar roll cut biscuits in mixture and place on baking sheet. Sprinkle any remaining sugar mixture over top and bake as above.
2. For quicker browning add 2 TBS. sugar to flour.
3. For shortcake, use 1/4 cup Egg Beaters and reduce milk to 1/2 cup. Add 3 TBS. sugar.

Fat: O
Oil: 18tsp
Per Serving: 1.5 tsp