



- FROM THE OFFICE OF ROY L. SWANK, M.D. Ph.D.
- EDITOR: BARBARA DUGAN ASSISTANT EDITOR: BARBARA KALKHOVEN

RESEARCH AT HOME AND ABROAD

► As many of you know, our research on plasma also is being pursued in London, England. Roy Garvin is now located in a laboratory in London continuing work started in Portland, Oregon.

Roy recently returned home for Christmas bringing optimistic news. He has been able to duplicate our work and clarify the nature of the abnormal protein. Based on this work he will soon be able to publish more results.

► Barbara Dugan will be in London in March to work in the ARMS (Action for Research Into M.S.) Clinic, which is located in the Central Middlesex Hospital. She will compare the ARMS low-fat diet and results with our diet and results.

PUBLICATIONS

We've been working hard! The following articles **have been accepted** for publication or **have recently been published**.

Swank, R.L., Vaden, E.A., Leckband, A.J. Confirmation of multiple sclerosis by red cell electrophoresis mobility. (To appear in *Clinical Hemorheology*)

Swank, R.L. Multiple sclerosis: the fat and oil relationship. (To appear in *Nutrition*)

Swank, R.L., Garvin, R. An unusual plasma protein in multiple sclerosis. (In publication)

Swank, R.L., Dugan, B.B. Effect of low saturated fat diet in early and late cases of multiple sclerosis. *The Lancet*, Vol. 336, Aug. 9, 1990.

THOSE SLEEPLESS NIGHTS

Restless, sleepless nights periodically torment all of us, but for a person with MS they can be more intense and frequent. Increased nervousness that accompanies the diagnosis is often a dominating factor. Until patients learn to manage their illness they can easily become upset and will lean toward excessive nervousness.

During the first year after initiation of the low-fat diet, patients remain uncertain about their health. They are not convinced that the diet will control the progressiveness of the disease. With continued support from their physician and close adherence to the diet they soon become more confident and their symptoms begin to subside.

The second year on the diet, patients begin to feel back in control and nervousness begins to lessen. Still, during this initial learning period the sleepless night may be more pronounced. Reduction in tension and anxiety, and a positive approach to therapy helps control, but

unfortunately does not arrest insomnia. During times of stress insomnia will appear once again.

The sleep pattern may include nights without sleep, or intermittent periods of light sleep, or three to four hours of restful sleep followed by two hours or more of wakefulness. During wakeful periods the mind is usually very active in what may be termed a run-away state. The events of the day are magnified.

Regardless of the particular pattern, the end result is exhaustion the next day. Symptoms tend to intensify and the patient may notice increased problems with memory and lack of concentration.

Now that we've established the nature of the problem, what can be done about it? It has been Dr. Swank's experience that following the guidelines below will help in managing the problem.

1. One hour of calm rest time daily helps the mind relax and the body recuperate. Listening to relaxation tapes, meditating, or taking brief "cat naps" during this rest time results in a more restful night's sleep.

2. Moderate exercise is helpful for relieving stress. It is important that the exercise does not fatigue the patient. Swimming, walking, and stretching exercises such as yoga are tolerated well.

3. During periods of on-going insomnia, sedation may be necessary. Only a few patients require sedation for long periods, and then only in moderate or light doses. Sedatives in small doses three times daily help to maintain calm during high anxiety times and promote "normal" sleep patterns.

If depression accompanies the stress, anti-depressant medications are available and useful.

The type of medication used must be discussed with a physician. It is important to note that MS patients are more sensitive to all drugs and alcohol than they were prior to the onset of the disease. In a practical way, this means that half or less the accepted "normal" dose almost always is adequate.

It is our observation that continued lack of sleep as well as agitation during the day is harmful to MS patients. Fortunately, patients on the low-fat diet for longer than five years have an increasing tolerance to stress.

Insomnia should be treated as a symptom of the disease. Take precautions to avoid it like any other symptom.

AMALGAM FILLINGS?

Replacement of amalgam fillings isn't a new idea. Dr. Swank was aware of the procedure as early as 1948, in Montreal.

It is Dr. Swank's opinion, based on his experience with a number of patients who have had their amalgam fillings extracted, that there is no correlation between the progression of disease and presence or absence of such fillings. Furthermore, extensive dental procedures have proven to be traumatic in many cases and have caused aggravation of the disease.

We have advised the few persons we have followed through amalgam replacement that sedation before, during, and after the procedure is advisable.

LISTEN TO THE WARNING SIGNS

If you listen carefully to your body you may avoid trouble. Fatigue, burning skin, intermittent numbness and tingling, intermittent double vision, and night sweats are all familiar, but often ignored, warning signs of trouble. It is uncommon for a patient to slip into an exacerbation without at least one of these warning signs, or symptoms, preceding the episode.

If you experience any of the symptoms described, immediately begin a rest program. Continue this program until all symptoms have passed and for at least two weeks more.

We recommend an hour of rest morning and afternoon. If you are working, try to rest during a break or lunch hour. Go to bed an hour earlier than usual and cut busy work and exercise back by half.

If the symptoms persist and begin to develop into more serious trouble then it is time to **STOP**. A long weekend or three to four days with no work may reduce or stop progression of the symptoms. Stop all exercise and extra work until the symptoms remit. By adhering to these simple rules you may avoid real trouble and possibly disability.

DRY SKIN

Dry skin in winter, a problem for many patients following the low fat diet, may occasionally be relieved by increasing the unsaturated oil in the diet. If this isn't effective, a tablespoon of light pure mineral oil added to the bath or rubbed on the body after a shower is often all that is required.

Is the skin of the legs below the knees still too dry? Pure unmedicated vaseline (petroleum jelly) can be helpful. Applying the vaseline after a bath or shower while the skin is still moist is almost always successful in relieving itching, redness, and scaliness. The vaseline is first rubbed on the hands and fingers of both hands and then applied to the skin in a rubbing action.

If the coating of vaseline is very thin, which is all that is required, you needn't worry about spreading oil to clothing, but for extra measure you can wear knee-high lightweight stockings.

A WORD ON NEW PRODUCTS

There are many new products on the market that contain no more than 1 gram of saturated fat per serving. Here's the new rule regarding these products:

ANY PRODUCT CONTAINING 1 GRAM OF SATURATED FAT PER SERVING, EVEN THOUGH THE INGREDIENT LIST MAY INDICATE AN UNDESIRABLE FAT, IS PERMISSIBLE. THIS 1 GRAM OF SATURATED FAT MUST BE COUNTED IN THE 15 GRAMS OF ALLOWABLE SATURATED FAT.

It is important that you do not exceed the 15 grams daily. Exceeding this limit once weekly can lead to continued problems.

NEW PRODUCTS

Cheese:

Alpine Lace - 0 grams fat per ounce, available in grocery stores

Cheese Smart - 0 grams fat per ounce, available from Mar's Cheese Castle, 2800-120th Ave., Kenosha, Wisconsin 53142 414/859-2244

Formagg Cheddar - 0 grams fat per ounce, available at Fred Meyer stores

Chips:

Guiltless Gourmet Tortilla Chips - 1.4 grams unsaturated fat per serving (as on pkg), available in health food stores (Eat in moderation)

Soup:

Cous-Cous brand - less than 1 gram fat, lentil, tomato minestrone

Crackers:

Wheat Thins - New low fat, 1 gram saturated and 3 grams unsaturated fat per 8 crackers (Eat in moderation)

Premium Fat Free Saltines - 0 grams fat

Cookies:

Fat-free Health Valley - less than 1 gram fat per cookie, available in grocery stores

Health Valley Apple Fruit Bars - less than 1 gram fat per cookie, available in grocery stores

Miscellaneous:

Entenmann's Fat Free Pastry - 0 grams fat, available at Oroweat bakeries, found mainly in California and on the East Coast

Emerald Valley Kitchen 3-Bean Dip - 1 gram unsaturated fat per serving, available at Fred Meyer Nutrition Centers

MISCELLANEOUS OFFICE NEWS

We are now billing through UMA (University Medical Associates), and the majority of our patient accounts are being handled by their office. If you receive billing from UMA then payment is made to them; if you receive billing from our office then payment is made to us. If you have any questions, please contact our office.

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You may have found when calling the office that you get the answering machine. We apologize for this inconvenience. With less staff we are forced to rely on the machine. Your call is always heard and if it is an emergency, returned promptly. Please remember, too, that we have an evening answering service for emergencies, so the office is always covered.

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Anthony Leckband has recently left us to return to school. He now plans to produce a low-fat lifestyle newsletter containing information about restaurants and health. He can be contacted at 3005 SW 11th, Portland, OR 97201.

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Although we're now settled in our new office, there are still a few confusing issues for our patients. Our mailing address will stay the same, except for a new mail code: Oregon Health Sciences University, 3181 SW Sam Jackson Park Road, MP 140, Portland, OR 97201.

We are located at 2525 SW 3rd Avenue, Marquam Plaza, Suite 140, Portland, OR

with parking around the back of the plaza. You'll find three patient parking spaces right outside our door.

If the reserved spaces are full or blocked, give your license plate number to Barb Kalkhoven and she'll call our parking office. If there was no reserved space empty and you get a ticket, bring it to our office and we'll send in an appeal.

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Cod liver oil is \$15.00 if picked up in the office, and \$17.50 if mailed. Please make the check out to OHSU Foundation and write it separately from donations.

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Dr. Swank will be out of the office from March 29th through April 16th. However, Barbara Dugan and Barb Kalkhoven will be in during regular office hours.

THE MULTIPLE SCLEROSIS DIET BOOK

Many people have asked us about our book being out of print. Bookstores may be confused because the old edition is out of print. The most recent edition, written by Dr. Swank and Barbara Brewer Dugan, is not out of print.

If you are unable to find the book in stock at your favorite bookstore, your local library should have it available to check out. Or, if you would like, you can order the book from the Oregon Health Sciences Bookstore. The bookstore does not accept COD's, so you'll need to send a check for the book plus postage. The present cost of \$21.10 is expected to increase slightly with the recent increase in postage. Contact the bookstore to find out the exact cost in the U.S. or other countries.

The bookstore's telephone number is 503/494-7708. The address is Oregon Health Sciences University, Bookstore L-216, 3181 SW Sam Jackson Park Road, Portland, OR 97201.

COOK'S CORNER

Here are two delicious winter soups to try.

Zucchini Stew

2 medium zucchini thickly sliced
 1 medium onion sliced (approx 1½ C)
 2 cloves garlic, chopped
 4 small potatoes, peeled and sliced
 ½ green pepper, sliced
 1 tsp salt (optional), ¼ tsp pepper
 ½ tsp oregano, 2 tsp fresh parsley
 2 basil leaves, chopped
 ½ tsp sugar
 2 tbsp oil

Place all ingredients in a 3 quart pot and stir to blend. Cover and cook over high heat, stirring often, for 3-5 minutes or until juices have formed. Reduce heat to medium high and cook 20-25 minutes more, stirring periodically. Stew is cooked when potatoes are tender.

Herbed Fresh Tomato Soup

2 medium onions, thinly sliced
 2 tbsp oil, 2½ cups water
 6 medium tomatoes, peeled and quartered (about 2 lbs)
 16 ounce can tomato paste
 2 tsp dry basil, ¾ tsp dried thyme, crushed
 1 tbsp instant chicken bouillon granules
 ½ tsp sugar, ½ tsp salt, ¼ tsp pepper
 few dashes tabasco

In a large saucepan, saute onion in hot oil until tender. Stir in remaining ingredients and bring to a boil; reduce heat and cover. Simmer 40 minutes. Place about 1/3 of the tomato mixture in a blender container or food processor bowl. Cover and blend until smooth. Repeat with remaining mixture. Reheat and serve.

- Minor accidents may cause severe anxiety -

By Roy Swank, M.D.

It has become increasingly evident that stress and basic nervousness (often referred to as free floating anxiety) influence the character of the symptoms and the overall progression of multiple sclerosis. In general, if a stress is short lived, it has slight if any effect; if a stress is prolonged and severe, the effect on the patient may be considerable and permanent.

Individuals with multiple sclerosis tend to develop a number of different symptoms when under stress. Which symptoms appear and how long they last depends on the personality and basic, or underlying, nervousness of the patient and upon previous as well as present neurological symptoms.

One reaction to external stress frequently not recognized is usually referred to as post-traumatic stress syndrome. This reaction usually occurs after automobile accidents, and may occur even when the actual physical trauma is slight. The reaction can also occur after a fall or an accident in the home.

The immediate result may be a feeling of calm and minimal or no complaints. In a few days, the patient may suffer from increased nervousness, sleeplessness, and headaches. Other symptoms, that also develop in people suffering from severe nervousness, may

include abdominal pains and distress, chestpains and palpitations, back pain, and/or general weakness.

At the same time, neurological symptoms previously present, such as blurred vision, numbness and weakness, difficulty walking, and urgency and frequency of urination may become an increased problem. Unpleasant dreams and increased difficulty sleeping are frequently experienced.

If the person with multiple sclerosis is adequately sedated from the beginning of the stress, given adequate medical and family support, and rests daily, recovery usually occurs in a month or so without permanent neurologic loss. If adequate treatment is not given, or is deferred, and if litigation is superimposed on this already complex picture, the symptoms will continue for months or years, and the increased neurological symptoms are apt to be permanent.

Nervousness can develop from stress outside our body, such as family difficulties or sickness. Just as often, nervousness can be brought on by our own brain or our consciousness overworking and misdirecting our energies, so that our imagination creates or embellishes problems, adding stress from inside ourselves.

Externally or internally caused high stress can lead to severe anxiety and agitation, with tendencies to hyperventilation, chest discomfort and palpitations of the heart, abdominal distress, night sweats, bad dreams

and weakness. If a person is unable to get control, a state of panic, extreme agitation, fright, and desire to run (escape) develops. If these symptoms are not controlled early, profound fatigue and weakness cannot be avoided.

In turn, these symptoms can often lead to depression. The cause may be overlooked, if the anxiety leading up to the depression is not recognized. The depression can be mild or severe. When severe, suicide may be considered, but rarely is attempted.

It is often helpful to prescribe anti-depressant drugs for depressed patients. However, in some cases the source of the depression--fatigue--is overlooked and the anti-depressant drugs fall short of expectations. Simple mild sedation so that patients can sleep and be calm during the day may be more helpful since the culprit may be simple anxiety and fatigue. Sedation may be given alone or can be combined with a mild anti-depressant.

- Dietary fat: enemy or friend? -

With all the bad publicity given to fats it would seem they can't be good for us. There is evidence that a diet high in saturated fat may be conducive to heart disease, stroke, colon cancer, breast cancer, and diabetes, as well as multiple sclerosis.

We are not only becoming a smoke-free society, we are gradually edging into a fat-free society. Everywhere we go we are reminded of fat, not just at our doctor's office. Even fast food establishments are offering low fat choices.

But although often thought of as our enemy, small amounts of fats are necessary for total

nutrition. The campaign to eliminate all fat from our diet ignores their importance.

There are two general groups of fats to be considered: saturated animal fats and unsaturated fats (oils). We will consider the saturated fats first.

Saturated fats are mainly found in our bodies in adipose tissues. These tissues form a coating for the entire body directly under the skin. Not only does this coat shield us from cold, but along with other fat deposits in the body forms a large store of reserve energy. This energy is available when the body runs out of stored carbohydrates such as glycogen.

Since fat supplies 9 calories of energy for every gram (carbohydrates and proteins both only provide 4 calories per gram), under severe stress the fat deposits can be extremely important. In addition, fat deposits surround the kidneys and other organs and protect them from trauma.

Saturated fatty acids predominate in saturated fats. They may be considered "bad" fats. Saturation refers to the number of hydrogen atoms attached to the carbon atoms in the fatty acid chain. They are connected by single bonds.

Examples of saturated fats include palm oil, coconut oil, and butter. Red meats, dairy products, and most processed foods contain saturated fat.

The Swank diet reduces saturated fat to six percent of the diet.

*** YOUR DIET FOR M.S. MUST CONTAIN NO MORE THAN 15 GRAMS OF SATURATED FAT DAILY ***

Unsaturated fatty acids are also needed by the body. If a fatty acid can accommodate more hydrogen than it already has it is said to be unsaturated. The unsaturated carbons are connected by double bonds.

A fatty acid with only one double bond is a monounsaturated fatty acid, and a fatty acid with two or more double bonds is a polyunsaturated fatty acid. Monounsaturated fatty acids are found in olive oil. Safflower oil and sunflower oil both contain polyunsaturated fatty acids.

The unsaturated fatty acids are contained in vegetable oils. Several of these acids cannot be produced in our bodies. In effect they are vitamins and must be included in our diet or we become deficient in them.

Essential fatty acid deficiencies are difficult to produce and in man can only be produced by combining a total absence of these essential acids with a marked excess of saturated fats. Then patches of redness and dryness of the skin, dryness of the hair, and general weakness and infirmity slowly develop. The addition of polyunsaturated vegetable oils, and reduction in the saturated animal fats in the diet quickly restore the body to a healthy state.

In normal supply, the essential fatty acids in polyunsaturated vegetable oils have a number of important supportive functions in the body. They help form cell membranes, and are in fact essential for the formation of normal healthy membranes. They also form a part of some hormones, take part in formation of digestive enzymes, and are necessary for the formation of normal nerve coverings.

For each function the amounts of essential fatty acids involved are extremely small.

Yet, as you can see, they are not only important but essential, hence the name "essential fatty acids."

Two essential fatty acids, omega-3 (linolenic acid) and omega-6 (linoleic acid) have received considerable attention recently. These are the acids necessary for health. (Note the difference in spelling between 'linolenic' and 'linoleic' acid.)

*** YOUR DIET SHOULD CONTAIN A MINIMUM OF 4 TEASPOONS AND A MAXIMUM OF 10 TEASPOONS DAILY OF VEGETABLE OILS CONTAINING UNSATURATED FATS. ***

In a nutshell: not all fats are the same; small amounts of fat are necessary to your health! Long-term study of how fat works in people with M.S. makes it clear that A SATURATED FAT INTAKE OF NO MORE THAN 15 GRAMS AND AN UNSATURATED FAT INTAKE (OILS) OF 4-10 TEASPOONS DAILY WILL MAINTAIN PROPER NUTRITION AND CONTROL FURTHER PROGRESSION OF MULTIPLE SCLEROSIS.

**The Dog Days are here!
AVOID THE HEAT.**

The following article was written by the spouse of one of our patients. He has had extensive practical experience in the use of inorganic fertilizers and pesticides in growing crops. He is now retired and is in a position to describe the general use of these substances from an "objective" point of view. We thought you would be interested in the grower's side of the organic vs. inorganic story.

The Ilers have owned and operated large commercial cherry orchards for many years.

- Organic vs. inorganic -

By Bert Iler

At Barbara's request I am going to present some food for thought about the quality and safety of American grown fruit and produce.

In the last twenty years or so, partly because of the intelligent and responsible use of agricultural chemicals, America's farmers have produced the most nutritional, safest, healthiest, and cheapest fruit and produce in the history of the world. There are several activist groups plus a substantial number of quite confused consumers attempting to change this remarkable achievement. They have brilliantly manipulated the U.S. Congress as well as 60 Minutes, A.M. Northwest, and other media shows. It's been demonstrated that their data from the FDA was badly flawed to the point of being meaningless. Most of their other data was so contrived and inaccurate that a substantial lawsuit has been filed. In time we should see some laws requiring groups like these and the media to be more truthful and less biased in these matters.

Needless to say our Congress has reacted very emotionally to this problem (they preferred the testimony of an Oscar winning movie actress to that of an expert toxicologist) and is requiring the reregistration of most if not all agricultural chemicals. This will cause many of the minor, but very important, chemicals used to be eliminated because the cost of reregistration is very high and could never be recovered. Also, the cost of those successfully reregistered will increase

dramatically as will the costs of most domestically grown fruit and produce.

Most agricultural chemicals are already quite expensive (many are in the \$100 to \$200 per pound range), consequently most farmers use them very sparingly, just enough to do the job and no more. Many chemicals are not systemic and are removed in the processing plant or simply by washing. Many have such a short active period they dissipate within a short time after application.

The chemicals that are systemic or are present in the product are so minuscule in amount that one would have to consume many thousands of pounds or more a week of almost any fruit or vegetable to receive what might be considered a toxic dose of chemicals. To eat this much of anything in such a short time frame would surely make you quite ill if not indeed kill you.

I believe there is a good deal of true, accurate scientific data that proves that the lion's share of America's health problems can be attributed to poor dietary considerations, serious overeating, smoking, alcohol and drug use, and other promiscuous life styles--and if there's anything wrong with America's food supply it's that it is simply too plentiful and has been too cheap.

I will discuss alternatives to agricultural chemical use such as "organic" no residue chemicals and what some of these chemicals are, where they come from, and their environmental effect in the next newsletter.

- OFFICE NEWS -

New address: As most of you probably already know, our office moved off the hill.

Our mailing address remains the same; our office is located at 2525 SW Third Ave in the Marquam Plaza, Room 140.

Lab news: Our lab has moved from Providence Hospital to 2330 NW Flanders, Portland, OR 97210, near Good Samaritan Hospital. The phone number is (503) 224-7228. The same staff remains.

Phone news: As many have probably already noticed, we have a new phone system. When no one is available to take your call, you'll receive the answering service. Please leave a message. All your calls will be heard, and Nancy, Barbara, or

Dr. Swank will return your call as soon as possible.

New office personnel: Barbara Kalkhoven has decided to take some time off work to travel, and relax. Nancy Crosby is the new Administrative Assistant. Nancy has worked at OHSU for 10 years, and we welcome her to our department.

Vacations: Barbara will be on vacation the entire month of August. Dr. Swank will be away from the office August 1 through August 9. Dr. Swank will be away from September 20 through October 4.

- FUTURE RESEARCH -

It is time to plan our research for 1992. We will need financial assistance if we are to continue. We have identified the abnormal protein in M.S. plasma--but we need to find out how we can use it.

First we should investigate the abnormal protein's use for early and positive diagnosis, then its use in treatment. These tasks will need financing and planning if we are to succeed or even make progress.

This is a reminder you will hear more about later. However, if you would like to contribute now, use the form in this newsletter.

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.
3131 SW Sam Jackson Park Road
Portland, OR 97201

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

CONTRIBUTOR'S NAME: _____

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