Nutrition Collaboration
A collective of health practitioners mentoring one another in topics related to nutrition.
Who, When, Why

- Anyone who wishes to join –
  You select yourself
- Second Monday each Month 1 - 2pm
- To share and build understanding of the common and uncommon knowledge of the practice of nutrition in the care and treatment of ourselves and the patients under our care.
Share your knowledge with each other.

Competition and knowledge hording only supports lost knowledge. This group endeavors to share knowledge and clinical experience to serve not only ourselves, but all people.
It is asked that we as a group consider:

“If you want to learn something read about it. If you want to understand something, write about it. If you want to Master something, teach it.”

Yogi Bhajan
What does this mean?

- At some point we ask you to present a topic for presentation to the group. This presentation need only be 30-35 minutes in length with a power point or notes available in Word for the group. You should be able to do a Q&A with the group to follow.

- Everyone will be encouraged to participate in the Q&A and it is asked that this become a roundtable type Q&A.

- If you chose not to present, that is your decision and you will not be ousted from the group.
Please Help This Run Smoothly

👍 Push *6 now to mute your line

⌚️ When the speaker is finished, if you have a question or wish to add to the discussion, press *6 to be put in the queue.
The Therapeutic Food Manual and its application.

Stephen Y. Dobelbower, DC DACBN
Park County Chiropractic
Livingston, MT
“Tropho-therapy is the science of healing by applied nutrition. It involves the field of deficiency disease, and the specific reactions to the lack of specific essential food factors.

Definition of ESSENTIAL food – a substance normally found in food that is necessary for life or health. Without such a component a specific reaction of specialized starvation occurs in the way of some disease syndrome.”
Preface to the therapeutic food manual

“In preparing this guide for the use of essential foods/herbs we have been aware of the difficulties which will be encountered by the reviewer, particularly insofar as the number of foods (products) recommended in each condition is concerned. Naturally in many conditions the recommendations will exceed the number of products which will actually be used in practice. This is expected.

However, our effort has been made in the direction of supplying the most complete information received from any reliable clinical source with information which would help the doctor qualify the selection of a particular program in any specific case.”
“It is not for the compiler of such information to leave out any information which would prove helpful to the doctor in making such a selection. We simply state that in each case, these are the essential food supplements, as reflected by clinical situations most recently reported to us, with which we suggest that you work. It rests upon the individual doctor to judge for himself the accuracy and reliability of such observations."
Preface to the therapeutic food manual

“This presentation of the book is in NO sense a treatise of the last word in nutrition, and must not be considered or judged as such. It is a compilation of the most accurate and reliable information of clinical suggestions that we have been able to obtain from “frontline” sources, doctors who are using our products in the field in practices which are successful from a practical viewpoint.

It will fulfill its purpose if it serves as a useful aid to the general practitioners.”
Preface to the therapeutic food manual

“We are indebted to the large number of doctors who have generously contributed their experience in the use of these factors by reporting case histories to us... Your continued cooperation in reporting case histories regarding use of nutritional entities will enable us to improve our recommendations and be widespread benefit.”
Anemia

- What is it?
  - A medical condition in which the capacity of the blood to transport oxygen to the tissues is reduced, either because of too few red blood cells, or because of too little hemoglobin, resulting in pallor and fatigue.
Why does it happen?

1. Blood Loss Exceeds Production!

‘Tis but a scratch!
Why does it happen?

2. Not Enough Raw Materials in diet to Create Blood. Or, an inability to assimilate those nutrients.
Why does it happen?

3. Production Facilities are diseased!
Symptoms of Anemia

- Fatigue
- Dizziness
- Fainting
- Low blood pressure
- Palpitations
- Rapid Heart Rate
- Chest Pain
- Angina
- Spleen Enlargement
- Glossitis
- Loss of Appetite
- Nausea
- Sense of Fullness/bloating
- Heartburn
- Constipation or diarrhea
- Numbness/tingling of hands, feet
- Yellowing of eyes
- Pallor of skin
- Yellowing of skin

- Cold skin
- Shortness of breath (esp with exercise)
- Muscular weakness
- Intestinal
  - Achlorhydria
  - Stool color change
- Integrity of Nails lessened
- Poor concentration
- Memory Loss
- Irritability – Personality changes
- Low-grade fever
- Weak bones – hip fractures
- Infants (either alcohol or vegans mothers)
  - Loss of reflexes, facial tremors, irritable, trouble feeding due to tongue and throat problems.
Review of Blood Dyscrasias

- **Normochromic**
- **Hypochromic**
  - Associated with a decreased MCHC & MCH
- **Hyperchromic**
  - Associated with a increased MCHC
Review of Blood Dyscrasias

- Normocytic
- Microcytic: Associated with a decreased MCV
- Macrocytic: Associated with a increased MCV
Pernicious anemia or the anemia of B12 Deficiency is classified as a Macrocytic (or Megaloblastic) anemia. Thus the RBC’s are LARGER than normal. This can be inferred on the CBC by looking at:

1. MCV – The Mean Cell Volume when higher than the norm is suggesting that the average cell volume is larger than normal AKA Macrocytic.
2. MCH – The Mean Cell Hemoglobin Count is another suggestion that either Iron levels are particularly high or the RBC’s or larger than normal.
3. RDW – The Red Cell distribution Width is a measurement of the amount that RBC’s vary in size.

Beyond the CBC’s - Consider

1. Serum Cobalamin (B12) – Is a direct measure of B12 that can determine deficiency in the absence of Anemia. *Remember waiting for megaloblastic anemia to diagnose B12 deficiency is like waiting for jaundice to diagnose a liver condition.*
2. Homocysteine (Hcy) - Because cobalamin is necessary for the synthesis of methionine from Hcy, low levels of vitamin B_{12} lead to increases in total serum Hcy.
3. Methylmalonic Acid (MMA) - The serum MMA test is more specific for vitamin B_{12} deficiency than the Hcy test. *(Hcy) and (MMA) are excellent tests when symptoms are suggestive of Anemia, but overt changes have not occurred on the CBC, or signs that your therapy is working and to address something else.*

*per·ni·cious*  
**adjective**  /pərˈniSHəs/  
Having a harmful effect, esp. in a gradual or subtle way
**Daily Dosage**       **Specific Function**

**General Recommendation:**  *Cyrofood, Cyro-Yeast*       6       Raw Bone Protein-calcium-determinant factors

**Specific Recommendations:**  Ferrofood       3       Anti-Anemia Complex

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Note: The recommendations given under “Anemia, Pernicious” may be used here in severe cases or when patient fails to respond to the above. *Betaine Hydrochloride* generally potentiates effects in all types of anemia by promoting assimilation of iron, calcium, and proteins.

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**Predisposing Factors**
Malnutrition (Fe, Protein, Ca++ deficient Diet)
Malassimilation (Hypochlorhydria)
Hemorrhage (Menstruation, etc.)
Toxemias (Hemolysis)

**Frequently Observed Entities**
Amenorrhea
Loss of Libido
Chronic Fatigue
Neuralgia
Breathlessness
Tachycardia

**Common Clinical Situations**
Pallor is most striking sign. Evidence of palms, lips, nails, palpebral mucosa membranes and conjunctiva. Symptoms may include faintness, vertigo, headaches, tinnitus, spots before the eyes and drowsiness and irritability. As a result of anorexia, breathlessness and tachycardia may be present.

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**Coordination Suggestions:**

<table>
<thead>
<tr>
<th>Classification Index</th>
<th>Bed Sores</th>
<th>Headaches</th>
</tr>
</thead>
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<tr>
<td>Malnutrition</td>
<td>Digestion, faulty</td>
<td>Hypotension</td>
</tr>
<tr>
<td>Malassimilation</td>
<td>Dizziness</td>
<td>Heart abnormalities</td>
</tr>
<tr>
<td>Hemorrhage</td>
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<td>Menstruation</td>
</tr>
<tr>
<td>Toxemias</td>
<td>Drowsiness</td>
<td>symptoms</td>
</tr>
</tbody>
</table>

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**Synergistic Products:** (See Pernicious Anemia)
## Physiological Consideration

A chronic anemia characterized by gastro-intestinal symptoms due to achlorhydria and neurological disturbances and loss of the “intrinsic factor” normally produced by the stomach mucosa. There are definite changes in the bone marrow.

Subnormal secretion of free hydrochloric acid has been observed in 75% of normal pregnant women which is sometimes referred to as the “pernicious anemia of pregnancy”. The pathognomonic sign of pernicious anemia is achlorhydria.

*Raw bone protein-calcium-determinant factors are important as supplied by one or more of the following: Ostogen, Calcifood, Bio-Dent, Cyrofood, all contain enzyme and determinant factors from bone.*

### Coordination

<table>
<thead>
<tr>
<th>Suggestion</th>
<th>Classification Index</th>
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</thead>
<tbody>
<tr>
<td>Drowsiness</td>
<td>Achlorhydria</td>
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<tr>
<td>Fatigue</td>
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</tr>
<tr>
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<td>Headaches</td>
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<tr>
<td>Hypotension</td>
<td>Bed Sores</td>
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<tr>
<td>Heart abnormalities</td>
<td>Digestion, faulty</td>
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<tr>
<td>Menstruation symptoms</td>
<td>Dizziness</td>
</tr>
<tr>
<td>Nails, integrity of</td>
<td>Dysphagia</td>
</tr>
<tr>
<td>Tinnitus aurium</td>
<td></td>
</tr>
</tbody>
</table>
**Daily Dosage**  |  **Specific Function**  
--- | ---  
**General Recommendation:**  
*Cyrofood, Cyro-Yeast*  |  Raw Bone Protein-calcium-determinant factors  
**Specific Recommendations:**  
Betaine Hydrochloride  |  Digestive secretion catalyst  
Ferrofood  |  Anti-Anemia Complex  
Spleen PMG  |  Specific Cell Activator  
Cataplex B  |  Metabolism of lactic acid promoting nerve integrity and conductivity  

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Note: Anemic states that fail to respond to iron and B12 often do respond when Super-EFF and Chlorophyll Perles are added to the schedule. One effect of chlorophyll is to sensitize iron; and the F2 (Super-EFF) is a phospholipid from liver that helps to protect cell determinations from enzymatic destruction or hemolysis.

The above effects are enhanced by use of Raw Sesame Butter or “Tahini” which contains vitamin T, the factor promoting the formation of blood platelets and combating anemia and hemophilia.

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**Synergistic Products:**

<table>
<thead>
<tr>
<th>Product</th>
<th>Dosage</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cataplex B12</td>
<td>3</td>
<td>Specific anti-anemia factor with stomach parenchyma</td>
</tr>
<tr>
<td>Super EFF</td>
<td>3</td>
<td>See Note</td>
</tr>
<tr>
<td>Chlorophyll Perles</td>
<td>3</td>
<td>See Note</td>
</tr>
<tr>
<td>Cataplex G</td>
<td>3</td>
<td>Cell proliferating factor, particularly concerning parietal cells.</td>
</tr>
<tr>
<td>Cataplex C</td>
<td>3</td>
<td>Increases $O_2$ carrying capacity of blood, protein protecting factor.</td>
</tr>
<tr>
<td>Sesame Seed Oil</td>
<td>1-3</td>
<td><em>Promoting the formation of blood platelets</em></td>
</tr>
</tbody>
</table>
How do you Fix it?

Any Questions?
Betaine Hydrochloride

GENERAL CONSIDERATIONS

The primary indication for **Betaine Hydrochloride Tablets** is achlorhydria-diminished-gastric secretions. When favorable response is obtained from this product, it should lead the clinician to investigate the possibilities of diminished secretions of the pancreas and liver. **Zypan**, containing Betaine Hydrochloride and pancreas factors, then becomes the product of choice. This may be assisted in its effects by, Pancreatrophin. We may list further associated products and concomitant conditions as follows:

- **Cholacol** (Bile salts and Collinsonia)-Cholecystectomy or constipation
- **Cholacol II** (Montmorillonite)-Adsorbent in intestinal toxemia
- **Okra, Pepsin E3** (Mucilaginous colloids)-Gastritis
- **Pituitrophin** has been shown to contribute favorably to many types of digestive disorders. Recall also that diminished gastric secretions inhibit the absorption of calcium, protein and iron and that these factors may need to be supplied as **Bio-Dent Tablets** (calcium), **Protefood** (protein) and **Ferrofood** (iron). Overallimentation should also be considered, small, high-quality foods at frequent intervals being given preference over large meals, the digestive capacity being limited by the quality and quantity of food it may handle at any one time. See "LOW STRESS DIET" for further information in this regard.

**Symptoms**

- a. Appetite changes (Loss of taste for meat, eating when not hungry, etc.)
- b. Acts to increase cellular activity.
- b. Flatulence (Lower bowel gas).
- c. Indigestion (2 to 3 hours after eating, fullness but no pain characteristic).
- d. Increased metabolic demands (Pregnancy, stress situations, prolonged fever).
- e. Vomiting and diarrhea (HCL loss by these routes).
- f. Pernicious anemia (Achlorhydria is pathognomonic).
- g. Demineralization (Either from excess use of alkalizers or from long-standing salt-free diets.

**Possible Etiological Background**

Physiological explanations of the mechanisms of gastric secretions lag far behind clinical evidence of their efficacious application, thus experience in use of hydrochloric acid in practice constitutes an essentiality for fullest spectrum of application. By and large this consists of making a Therapeutic Test in most subjects suspected of diminished gastric secretion. When the factors are known and properly observed, the findings are quite positive clinically in most cases. Unfortunately, laboratory methods, even though practical, may not reveal the limited range of mild insufficiency, but rather tend to show the extremes of achlorhydria and hyperacidity. The "intangible" middle range, which consists the majority of those in need, practically remains to be diagnosed by the clinical test method. The importance of this test is shown by statements from many authorities that gastric secretions diminish almost in ratio to the aging process. See "Achlorhydria" in Clinical Trophology.
Betaine Hydrochloride

Label: Two tablets contain: 270 mg Betaine HCL, 80 mg Pepsin 1:10,000, 130 mg Ammonium Chloride
USE: To supply Hydrochloride Acid in Achlorhydria. Dose: Two Tablets after each meal or as directed.

Synergists:
- a. Pancreatrophin
- b. Cal-Amo
- c. Cholacol
- d. Cholacol II
- e. Okra, Pepsin E3

Activity Contributed:
- Protomorphogen
- Anti-alkalosis factors
- Bile salts
- Adsorbent
- Mucilaginous colloids

Administration
Dosage: Symptomatic response is criterion of levels required. This should be regulated to time of indigestion symptoms, thus if symptoms occur before administration, 3 or 4 hours after meals, and after administration 5 or 6 hours after meals, it simply shows that the fermentation process has been delayed and that dosage needs to be increased. **It is the number of tablets per meal, not per day, which is important.** Thus, 3 tablets with evening meal, for example, may produce appreciable results, whereas, 3 tablets t.i.d. may not be discernible.

Effect: Relief from gastrointestinal symptoms when from this cause is usually immediate, or within a few days; in absence of gastrointestinal symptoms, anemias and emaciation, for example, long term use is required.

Side-Effects: The various reactions which occur have a specific diagnostic value. For complete information on this subject see “Achlorhydria”, Clinical, Trophology.

Symptom Characteristics: Anemia, loss of taste for meat, and gastrointestinal symptoms are most common findings. See “Zypan” in product bulletin for further details.

Clinical Tests See above: Diagnex [Squibb] is a relatively simple test which may be useful.
Ferrofood

GENERAL CONSIDERATIONS

1. Ferrofood is an anti-anemia complex product containing unsaturated fatty acids, spleen extracts, Vitamin B12 in addition to organically combined iron, differing from usual hemo-tonics by supplying a variety of substances designed to combat anemia.

2. Ferrofood may be used as a dietary addition, not only in frank anemia, but also where tonic and blood building effects are desired, as would be the case, for example in emaciation and recuperation.

Symptoms
1. Anemia (Classical features: pallor of skin, mucous membrane, nails; tachycardia, anoxia, weakness, hyperirritability, restlessness)
2. Predisposing Factors: (Hypochlorhydria [low salt diets and common in pregnancy], faulty diet, mental stress, overwork, environment)
3. Frequently occurring in: (Nephritis, pregnancy, febrile diseases, hemorrhage, toxemia, amenorrhea, neuralgia, loss of libido)
4. Other Considerations: (Rheumatoid arthritis, bed sores, vertigo, dysphagia, drowsiness, fatigue, headaches, gingivitis, glossitis, tinnitus, hypotension)
5. Gastrointestinal Conditions: (Vomiting, diarrhea, colitis, indigestion, constipation, gallbladder disorders)

Possible Etiological Background
The etiological background of anemia includes many factors in addition to iron and B12. Lecithin, chlorophyll, unsaturated fatty acids, spleen, bone marrow and others have been reported as having a productive influence in anemias. Insufficiency of gastric secretions, particularly hydrochloric acid, is commonly involved in chronic anemias. The integrity of the R.B.C. and its physiology would also include such regulatory mechanisms as acid-base balance, fluid balance and protein metabolism as well as, circulatory disturbances, the metabolic rate and integrity of the reticuloendothelial system. The prominence of anemia in nephritis and nephrosis leads to the conclusion that the kidney is an important organ in the anemia syndrome, probably by direct action of preventing hemolysis brought about by toxins or by other enzymatic influences not as yet completely understood. Vitamin T, as found in sesame butter, has recently been reported as an anti-anemia factor.

Symptom Characteristics: Blood tests are the only positive means of diagnosis. However, it is well to keep in mind the high incidence of anemia in the general population and it therefore seems likely that a physiological anti-anemia formula (Ferrofood) may be recommended in many more cases than is practical to diagnose by specific blood tests, although these are always desirable.
**Ferrofood**

**Administration**
Dosage: 1 to 3 per day. Initial dosage may be increased in severe cases.

Effect: On sufficient dosage, observable results may be experienced by the patient in as little as one - two days.

Side-Effects: Unlike many inorganic iron products in general use, Ferrofood does not tend to be constipating. Side effects are rare.

**Synergists:**
- **a. Zypan**
- **b. Chlorophyll Perles**
- **c. Lecithin Perles**
- **d. Sesame Butter** (Commissary)

**Activity Contributed:**
- Digestive catalyst QIC1 source
- Influence in anemia reported
- Influence in anemia reported
- The sesame products are sources of Vitamin T, important in platelet formation and anemia.

**Label:** Each capsule contains 10 mg of Iron, organically combined as Iron Phytate, Cytotrophic Extract of Spleen 38 mgs. B12 1.7 mcg, specific unsaturated fatty acids from beef and fish liver lipoids, with extracts of alfalfa, beef liver and fresh raw veal bone (including bone marrow). Two capsules of this product contains (more than) the average adult minimum daily requirement of iron. This product is sold for use as a part of the nutritional pattern of a human body. It has no drug use known to us in the dosage recommended. Suggested schedule: 1 to 3 capsules per day or as directed. *(note: also listed: porcine duodenum!)*

**NOTE:** Antianemia supplementation may be particularly important in the recuperative phases of infectious diseases, particularly where there has been fever such as commonly occurs in cold, flu, pneumonia, etc. Also to be considered is the use of Ferrofood for blood donors following transfusions and contributions to blood banks.

<table>
<thead>
<tr>
<th><strong>Clinical Test:</strong></th>
<th>Tallqvist’s Hemoglobin Scale</th>
<th>Color chart readings</th>
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<tr>
<td><strong>Laboratory Tests:</strong></td>
<td><strong>Test:</strong></td>
<td><strong>Need Shown By:</strong></td>
</tr>
<tr>
<td>Blood Count</td>
<td>Evidence of anemia</td>
<td></td>
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</tbody>
</table>
Catalyn vs. Cyro-Food

**Catalyn**

- Defatted wheat (germ), carrot (root), calcium lactate, nutritional yeast, bovine adrenal, bovine liver, magnesium citrate, bovine spleen, ovine spleen, bovine kidney, dried pea (vine) juice, dried alfalfa (whole plant) juice, mushroom, oat flour, soybean lecithin, rice (bran)...

**Cyro-Food**

- Carrot (root), nutritional yeast, defatted wheat (germ), date (fruit) powder, oat flour, bovine bone, bovine adrenal, rice (bran), veal bone, bovine spleen, ovine spleen, bovine kidney, bovine liver, mushroom, dried alfalfa (whole plant) juice, dried pea (vine) juice, soybean lecithin...

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John Courtney: Cyrofood is a crude form of Catalyn...Cyrofood is also one third Calcifood. Calcifood is raw veal bone flour. There is some veal bone extract in Catalyn but not to this degree... It contains all the vitamins and known trace minerals, plus the phosphorous, calcium and protein from veal bone.
Possible Etiological Background - The etiological background of anemia includes many factors in addition to iron and B12. Lecithin, chlorophyll, unsaturated fatty acids, spleen, bone marrow and others have been reported as having a productive influence in anemias. Insufficiency of gastric secretions, particularly hydrochloric acid, is commonly involved in chronic anemias. The integrity of the R.B.C.” and its physiology would also include such regulatory mechanisms as acid-base balance, fluid balance and protein metabolism as well as, circulatory disturbances, the metabolic rate and integrity of the reticuloendothelial system. The prominence of anemia in nephritis and nephrosis leads to the conclusion that the kidney is an important organ in the anemia syndrome, probably by direct action of preventing hemolysis brought about by toxins or by other enzymatic influences not as yet completely understood. Vitamin T, as found in sesame butter, has recently been reported as an anti-anemia factor.

NOTE: Anti-anemia supplementation may be particularly important in the recuperative phases of infectious diseases, particularly where there has been fever such as commonly occurs in cold, flu, pneumonia, etc. Also to be considered is the use of Ferrofood for blood donors following transfusions and contributions to blood banks.
Cataplex B

GENERAL CONSIDERATIONS

The energy that a cell needs to maintain itself and perform its various functions is supplied by the oxidation of the food within the cell. In this respect, Vitamin B complex performs an important role by catalyzing the various chain reactions through its co-enzymes. This to a very large extent is related to carbohydrate metabolism and as such we must consider not only the amount of Vitamin B complex which is provided by the diet, but also the requirements for that vitamin which may be created by the ingestion of excess amounts of high carbohydrate foods, particularly sugars. Thus, the requirements for Cataplex B vary according to the amounts of carbohydrates ingested. By this reason it may prove futile to administer Cataplex B without a corresponding reducing the overalimentation causing the initial problem. However, when both Cataplex B is given and carbohydrate intake is brought into range, results are usually satisfactory.

The nutritional effects of Cataplex B may be listed as follows:

a. Lactic acid metabolizing factor (oxidation of lactic and pyruvic acids).
b. Promotes motor nerve conductivity.
c. Essential in co-enzyme systems (acetylcholine reaction).
d. Opposes vaso-dilation due to lack of arteriole-capillary tone.

In the clinical application of Cataplex B, the following information is useful:

1. Cataplex B, containing the B4 factor, has an effect of restoring function to localized areas in myo-neural disorders.
2. In heart failure the urinary output may be low due to an inability of the heart to pump the blood in sufficient pressure to the kidneys. In these cases, Cataplex B, by increasing the work capacity of the heart, may raise the pressure sufficiently to produce a physiological diuresis.
3. In all cases where the diastolic rest period is shortened (See Endocardiograph literature), Cataplex B should be preceded by Cataplex G until this is normal. Due to its vaso-dilating effects Cataplex G assures correction of deficiencies which may be aggravated by Cataplex B given prior to this correction.

Symptoms

1. Poor Muscular Tonicity (Lack of appetizer weakness of legs, muscular weakness, lack of stamina)
2. Lactic Acid Excess (Drowsiness after eating due to inability to oxidize products of fermentation)
3. Heart Symptoms (Enlargement, tachycardia, fibrillations)
4. Edema (“Water-logged” tissues, diminished urination)
5. Neurological Symptoms (Feeling of band around head, tenderness of calf muscles, hyperirritability, melancholia, etc.)

Symptom Characteristics: These follow the muscular and nervous patterns, weakness, drowsiness and mental aberrations being most common the outline which may be frequently vague or indistinct. Ingestion of high carbohydrate foods is often most significant finding.

Possible Etiological Background

• Inability to metabolize lactic acid accumulated during exercise
• Lactic acid excess due to unfavorable intestinal environment
• Motor nerve conductivity
• Vaso-dilation effect produced in lactic acid excess
• Nerve integrity.
Cataplex B

Administration
Dosage: 1 to 4 (6 tablets) per day is usual dosage. In beriberi syndrome (tachycardia, edema) amounts may be much higher and should be governed by the diuretic effect produced in these cases, kept at increased level as long as diuresis is produced.

Effect: Ordinarily results on adequate dosage are very rapid, symptomatically being evident within a few days, within a few minutes where the Endocardiograph is being used to measure its effects.

Side-Effects: These are very rare. If, when they do occur, it seems a specific indication for Cataplex G, see part No. 3 under General Considerations for discussion.

Synergists:
- **a. Organically Bound Minerals**
- **b. Calcium Lactate**
- **c. Cataplex G**

Activity Contributed
- Source of potassium necessary in many synaptic and enzymatic reactions to which Vitamin B Complex contributes.
- Acts to combat acidosis, a condition frequently found concomitant with Vitamin B complex deficiency states.
- Source of enzyme precursors which act complimentary with those supplied by Cataplex B.

Clinical Test: Endocardiograph - Split sounds, fibrillation and other deviations which are usually corrected within a few minutes after administration of B Complex.

Laboratory Tests: Unfortunately, a satisfactory laboratory method of determining lactic acid levels has not yet been devised.

Label: Contains 125 U.S.P. units of Vitamin B1 per wafer with naturally associated factors from yeast, cereal germ, beet juice and liver, with binder of milk solids. 3 wafers per day furnish the full daily adult minimum Vitamin B1 requirement (333 U.S.P. units). 1 to 4 wafers per day or as directed. 2 tablets per meal or as directed.
The deficiency of Vitamins B and C can cause degeneration of the bone marrow, which is admittedly the major etiologic factor in pernicious anemia.

“Rats stunted by Vitamin B deficiency have bone lesions that are identical with those seen in guinea pigs suffering from acute and uncomplicated scurvy. Marrow elements are destroyed and replaced by reticular tissue supporting widely dilated congested blood vessels.” (Shipley, McCollum and Simmonds, J. Biol. Chem., 49:399, December 21.)

The regeneration of red cells in the bone marrow seems to be dependent upon the presence of determinants, too, and pernicious anemia seems to be specifically a state of erythrocyte determinant paucity. The same adrenal factor helps in the treatment of pernicious anemia (Protomorphology, page 295), and a liver extract (apparently F2) was effective also (page 295).

We have received some clinical reports suggesting that vitamin F2 (Super EFF) is the missing link in liver therapy for pernicious anemia.
**Spleen PMG**

**GENERAL CONSIDERATIONS**

The following are extracts from Practical Endocrinology, Henry R. Harrower, M.D., pages 181 to 183:

Harrower reports functions as follows:

1. Disposal of red blood cells
2. Generator of leukocytes
3. Development of immunity
4. Resistance to infection
5. Action on intestinal peristalsis
6. Metabolism of iron

“The nutritional influence of spleen therapy, mentioned many times in the literature, is not explained by specific effect that it possesses. The explanation of Charles Bayle, now of Paris, is original, his conclusions being based on years of patient experimentation on animals while carrying on an extensive consulting practice at Cannes on the Riviera. Bayle’s theory is this:

The blood contains the mineral elements in two forms:

1. Those in colloid state suitable for cellular appropriation and thus not suited for elimination by the kidneys, and
2. The mineral cellular wastes, which are dissolved in the plasma and destined for elimination.

If these elements lose their colloidal form, they are promptly eliminated, and a condition of demineralization obtains. The capacity to maintain the mineral salts in a colloidal state is evidently of considerable importance, and, according to Bayle, its regulation seems to belong to the spleen.

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**CLINICAL CONSIDERATIONS**

<table>
<thead>
<tr>
<th>Symptom Characteristics:</th>
<th>Involvements of R.E. system are most common findings (lymphatic system, blood integrity). Fluid balance (edema) and allergic reactions are also indicative.</th>
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</thead>
<tbody>
<tr>
<td>Clinical Test:</td>
<td>a. Palpation Lymph node swelling, spleen enlargement</td>
</tr>
<tr>
<td></td>
<td>b. Examination Hydration or dehydration</td>
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<td>Laboratory Tests:</td>
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<tr>
<td></td>
<td>Blood Count (Differential) Deviations from normal findings</td>
</tr>
</tbody>
</table>

**Possible Etiological Background**

- Control of mineral metabolism disturbances in allergic reactions is considered possible.
- Relation to lymphatic system is noted.
- Regulatory effect on blood volume.
- Believed to be a factor in control of hemoglobin and R.B.C.’s.
- Possible relation to colloidal state in mineral metabolism.
- Possible relation to activity of leukocytes.
GENERAL CONSIDERATIONS CONT:

On page 182: (Studies cited to show influence of spleen action simulating activity of parathyroid hormone). Removal of the spleen from dogs was followed by hypocalcemia. When a desiccated spleen extract was fed to these splenectomized dogs, the low calcium index was promptly raised to normal, although identical treatment to parathyroidectomized dogs had no such effect on the calcium figure.

Quoting from the journal of the American Medical Association (Sept. 27, 1930, xcv, P. 937):

From the studies here discussed it appears that the spleen is likewise concerned in calcium metabolism. Furthermore, it appears that the results might even be interpreted to mean that, in the absence of the parathyroid glands, the spleen can take over their function in preventing tetany. These intricate relationships between organ systems illustrate the ends to which the organism as a whole will go in order to preserve the vital equilibrium; furthermore they indicate, in some measure, the inherent difficulties in outlining effective therapy.”

Our observations on the above data: In “An Introduction to Protomorphology”, by Royal Lee, it is stated that it is the mineral component of the protein which produces the reaction in allergic states...and that a protein which has lost its mineral component (as Bayles outlines above) is denatured. Further that these mineral components as combined proteins (enzymes known as protomorphogens and Natural Tissue Antibodies) are active principles regulating the processes of growth and repair and the important principle of the allergic reaction as it pertains to these processes. (A discussion in greater detail is given in the above mentioned booklet.) The influence of spleen on calcium metabolism may be but one manifestation of these principles, which could theoretically be extended to include all of the colloidal trace minerals active as combined minerals in the various enzyme systems. Investigation along these lines may reveal a much wider application of spleen therapy than has been suggested here.
CHLOROPHYLL COMPLEX

GENERAL CONSIDERATIONS

In the use of Chlorophyll Perles both local and systemic effects must be taken into consideration, as follows:

1. The local effect of chlorophyll on the intestinal mucosa is to combat inflammation and promote healing, as would be indicated by a wide range of gastrointestinal disorders from diarrhea to stomach ulcers, colitis, gastritis, etc.

2. The systemic effect is to act as a detoxifying factor with a tonic effect, useful in most debilitated states associated with chronic disease.

3. Chlorophyll is an antagonist of guanidine.

Clinical Application is from following stages:

- Effect upon endocrine system as sex hormone precursors
- Effect as prothrombin factor, Vitamin K, important in cardiovascular and circulatory problems
- Effect in lowering blood pressure.
- Effect in hemoglobin formation
- Favorable effect in hypercholesterolemia
- Favorable effect in arteriosclerosis
- Source of fat-soluble vitamins (A, E, F and K)

Administration

Dosage: 1 to 6 per day or as directed. Bile Salts (Cholacol) may be necessary to promote absorption of fat-soluble factors.

Effect: Blood clotting time may be changed in a few hours. The tonic effect and other noticeable changes may require several weeks.

Side-Effects: None known.

Synergists: Activity Contributed:

b. Cataplex A-C-P  Epithelial and connective tissue integrity
c. Ferrofood  Complements Blood Factors

Label: Fat-Soluble Chlorophyll Complex from Alfalfa, Buckwheat, and Soybeans. 385 mg per Perle.

CLINICAL CONSIDERATIONS

Symptoms:
- Vascular Changes (Telangiectasia, purpura, petechiae, etc.)
- Hypertension
- Acne (Associated with menses)
- Healing (Ulcers, skin conditions, gastritis, etc.)
- Kidney Dysfunction (Also bladder irritation)
- Toxemia (Associated with arthritis, arteriosclerosis, coronary sclerosis, etc.)
- Hemorrhage (Excessive menses, nosebleed)
- Colitis (Gastritis, stomach ulcers)

Possible Etiological Background:
- Capillary integrity, associated with prothrombin factor (Vitamin K).
- Possible toxemia, also kidney involvement.
- Deficiency of hormone precursors.
- Healing action of chlorophyll.

Protein metabolism, prothrombin factor (Vitamin K).

Probably guanidine-neutralizing effect, its presence being a suspected factor in these diseases.

Prothrombin factor (Vitamin K).

Healing action of chlorophyll.

Symptom Characteristics: Usually concerned with blood clotting, vascular changes, or toxemia.

Clinical Test: Prolongation of the blood clotting time beyond the usual 6 to 8 minute period is indicative of need.
If you would like to contribute to future presentations of Nutritional Collaborations...

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THANK YOU FOR JOINING IN TODAY