Muscle N' Bone

New Discovery Can Help or Prevent Neck Pain, Back Pain, Foot Pain and More

This is a collection of sample pages from the section describing the three groups of muscles for free viewing in PDF via the web site at http://www.NeckBackFootPain.com .

Note that the resolution on this edition is greatly reduced from the print version so that the file size will be small enough for rapid downloading. This makes the drawings and photos more fuzzy than in the print version. Also, for the same reason, this version is not printable.

Success Stories

"I was absolutely captivated by the discoveries of Dennis Denlinger as to the engineering structure of the body. It has explained a number of things I could not understand and given me the corrective actions to other, seemingly 'incurable', muscular disorders.

"I feel this is a great step forward towards the understanding of how our body functions and how to keep it always in good shape." **M.F.**

"I used some very basic data from Mr. Denlinger's book which resulted in an almost immediately more comfortable body (in specific situations) and also an understanding of how to maintain and enhance the degree of comfort.

"Thanks!" **K.F.**

"After a short talk with Dennis I was able to understand and work toward correcting a flat foot condition that I have lived with most of my life. I feel certain that this new knowledge will make a big difference in my posture, comfort and well being. I am very enthused over the result." **R.H.**

"I was having terrible trouble with shin splints (I am a dancer). Mr. Denlinger showed me how to use the foot arch muscle and I haven't had any trouble with shin splints since!" **T.F.**

"For the first time in my life I know how to walk and have techniques to use to regain my posture and relieve the pain in my back and feet.

"Much thanks goes to Dennis Denlinger for this gift.

"This would be beneficial for everyone to know this valuable data. This data needs to be promoted to everyone!

"Very special thanks." **R.L.**

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by

Dennis Denlinger

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Muscle N' Bone: A User's Handbook for his Human Body

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NOTE: The collection of building blocks, rubber bands, sticks and foam rubber noted below is no longer being produced and therefore cannot be included with the re-print version of *Muscle N' Bone*. At some future time it may become available for separate purchase through the web site.

INTRODUCTION

In this book, I shall be talking to the average user of the human body, and this probably means *you*. Others of you who are not average users, such as medical doctors, osteopathic doctors, chiropractic doctors, physical therapists, nurses and so on, may pay attention if you wish, and I hope you do. However, the language will be normal everyday English with none of the $24 Latin words so loved by doctors. Among those who understand the meanings of those words such language is very useful, but we who are average users of human bodies have little need of knowing what the "sterno-cleido-mastoideus" muscle is.

I will present many photographs and drawings to make the everyday English even more clear. Also included with the book is a collection of building blocks, rubber bands, sticks and foam rubber, which I will tell you how to use to make models in order to better understand what I am saying. These aids to understanding have been designed so that all the lathe operators, businessmen, housewives and college professors who read what I have to say will better understand how the muscles and bones should be correctly operated. I am writing very simply because if what I say, along with the photographs, drawings and models, is not completely clear, you probably would not believe it.

You will be learning basic information about how the human body should be operated and why, what kind of trouble poor operation can cause, how one body was checked for correct operation and how it was trained to operate better. To use this information, the test body had to be sound, with no broken bones, no missing arms or legs, no muscles which had been completely cut through, nor could it have been in need of other medical attention. If the body would have had any of these problems, only parts of this information could have been used.

A new car usually comes with an instruction book. The book tells, among other things, that the car can be damaged by shifting to reverse when driving forward at 30 miles per hour, and that the go pedal and the stop pedal should not be stepped on at the same time. There are many such instruction books which talk about fuel (food)

for the human body. But, until now, there have been no instruction books which tell how the muscles and bones should be used. I would bet that most people do not know that there are five basic springs for absorbing shocks which can be controlled by the user of the body and which must always be operated when the body is standing. The nonoperation of these five springs can be the source of pain, tiredness, dizziness, sleeplessness and just plain misery. Weakness in these springs can lead to serious injury when doing heavy work or fighting through an opposing football team. When the springs are not working correctly, the body will probably have ugly posture, loose stomach muscles and flat feet. To my knowledge, nobody has ever written thoroughly about these springs and how they absorb shocks.

Although in addition to the five springs the reader will learn about other basic operations and limitations of muscle and bone, I am not trying to turn him into an expert. My goal is to give him enough information to know when the most basic, yet the most important, operations are working correctly and to be able to talk intelligently with that body mechanic, his doctor. Because of this, some of what I say may seem incomplete or simple-minded to the expert. Also, the average reader may be puzzled by some things which should agree but do not. I have tried to make note of all such disagreements, but many of my readers are very smart and will spot that information is missing. If anyone wants to understand it all, I would suggest he make a thorough study of physics, geometry, the mathematics of columns and beams, and of each muscle and bone in the body. However, the basics which can be learned here are all anyone really needs to know unless he has problems, and then he should see his doctor.

The information in this book was discovered as a result of many attempts to stop unending pain in my own body. It was indeed a case where necessity was the mother of invention. I had studied architecture in college where I learned a great deal about the forces loaded on a building by gravity, snow, wind, people and so on, and also how the building should be built to carry those loads. It was this knowledge which I applied to the human body and thereby came to learn how to better operate it.

There are people who go to doctor after doctor and never seem to get well. There are others who return to the same doctor time and time again with the same problem. Some of these people really do not want to have healthy bodies and somehow just cannot get well. Those people who want sympathy rather than health can close this book right now.

Then there are others who really do want to have a healthy body and do not understand why they are always sick. It may be that these, who do want health, are not operating their bodies correctly. And some people need to know how to protect their bodies from violent shocks in sports or on their jobs. Yet others just want to have nice posture and a tight tummy like a fashion model, without having to do special exercises every day. Such a reader, who thinks his body does not feel or work as well as it should or could and wants information about how it should be operated, is welcome to go on reading.

Dennis Denlinger

SECTION 1C
Muscle Organization

As I said earlier, muscles have two kinds of jobs to do: holding bones tight in their joints and being the engine which moves the body. In some parts of the body, mainly the arms and legs, the same muscles usually do both jobs. Generally, in the rest of the

body, muscles can be divided into three groups: longer, thicker muscles which make major body movements such as nodding the head or dancing the twist; shorter, smaller muscles which hold the bones tight in their joints; and medium length muscles which position bones, or groups of bones, correctly in relation to other bones. There is a lot of overlapping or sharing of jobs so this will not hold true in every case.

These three groups of muscles can be most clearly seen as separate groups in the spine or backbone, including the neck, so I will use it as an example. The first group we will look at is that of the longer, thicker muscles which make major body movements. An easy to find muscle runs from behind and below the ear to the top of the breastbone. Locate this muscle on the left side of your own neck by putting a finger on each end of it as Alan is doing in the top picture of plate ten. This muscle contracts to pull the head around to face right, as he is doing in the bottom left view of the same plate, and then relaxes a bit as the head is turned straight again. It also contracts to tilt the head to the left, as Alan shows us in the bottom right picture, and then relaxes a bit as the head is brought level.

If you like, you can try these moves with your own body to feel how this muscle operates. Then you might find a couple other examples of longer, thicker muscles to show how they make major body moves.

The second group of muscles to look at are the medium length muscles. To best understand these muscles, we can look to the world around us. Have you ever seen the wires which brace a tall television or radio transmitting tower to the ground? These are called guy-wires. The top view of plate eleven shows a tower braced with guy-wires. The bottom view shows what might happen to the tower if some of the cables were broken. It might be well to make a model of this so get out the long skinny stick. Place one end on a table and push down on the top so that it bends some, as Laureen is doing in the left photograph of plate twelve. Then let your other hand represent guy-wires and use it to brace the middle of the stick while pushing down as she is doing in the right picture. With this experiment, you can feel how much strength the guy-wires add. The medium length muscles act like guy-wires in the body.

You can see examples of medium length muscles in the neck by turning to plate eighteen. It was not put there to scare you. Rather, it is a view of the neck and head drawn to show the muscles nearest to the vertebra bones. Honest Indian! That is what you would see if you could look in the mirror, take away the jaw, and see the layer of muscles nearest your spine. The muscles going from the sides of the

Plate 9

Plate 10

vertebra bones down to the ribs are examples of guy-wire type muscles which keep the spine straight. When the longer muscles twist and bend the body, the job of these medium length muscles is to keep the vertebra bones from twisting or tilting more than necessary, and then to bring them straight again as the body straightens. Is it not wonderful that someone designed these human bodies to work so neatly?

To find out what could happen if the vertebra bones were not correctly positioned, get out the four blocks and stack them in a staggered manner, as Laureen did in the left photograph of plate thirteen. Press down on the top block near an edge and the stack tumbles over rather easily. Stack them again but this time straight, as shown in the right picture, and press down once more, but in the center and harder. Just as the blocks, the bones can carry a greater load when neatly stacked than when staggered.

The last group of muscles to look at are the shorter, smaller muscles which hold the bones tight in their joints. Every bone has one best position to sit in its joint and a muscle, or many muscles, to keep it there while it twists and turns.

For an example, we can look at the vertebra bones in the upper back. As with every other vertebra, except the top one in the neck, each vertebra bone in the back has a piece sticking down to catch the one below it and stop the lower one from sliding toward the rear. You can see a drawing of several of these vertebrae in the top view of plate fourteen. The best position for each of these vertebra bones is pulled tight up and down to its neighbors above and below; and pulled back tight against the piece sticking down from its neighbor above.

The vertebrae are pulled together in the up-down direction mainly by the longer muscles and by gravity. The shorter muscles help some. Each vertebra is pulled back tight against the one above it by the shorter, smaller muscles which run from the thornlike pieces sticking out from its sides to the thornlike piece sticking out the rear of another vertebra one, two, three or more places above it as shown in the bottom view of plate fourteen. You can see in plate twenty-five that there are muscles like this the entire length of the spine. When these shorter muscles do not work, the vertebra bones can slide around in their joints, as shown in the middle view of plate fourteen. In this drawing, the ligaments, which stop the vertebra bones from moving too far out of place, are not shown.

In the arms and legs, longer, thicker muscles on the "uphill" side of a joint generally operate bones on the "downhill" side of the joint.

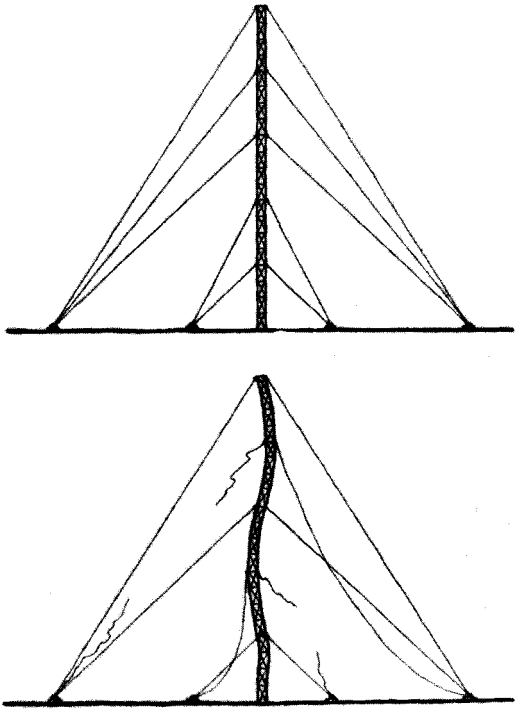

Plate 11

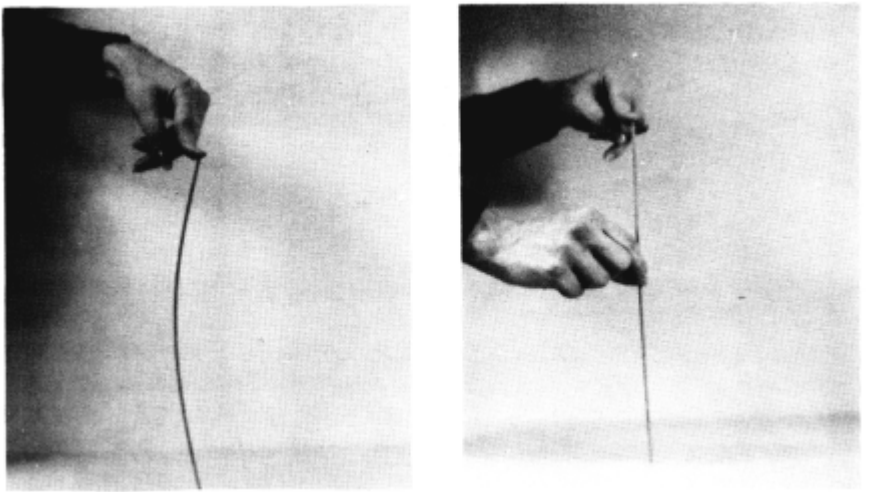

Plate 12

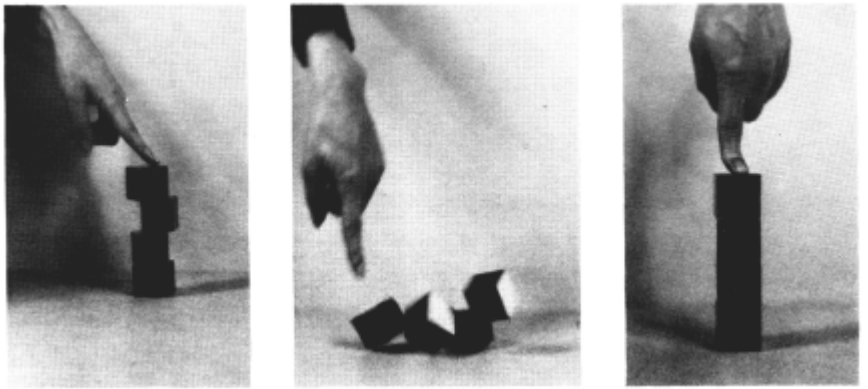

Plate 13

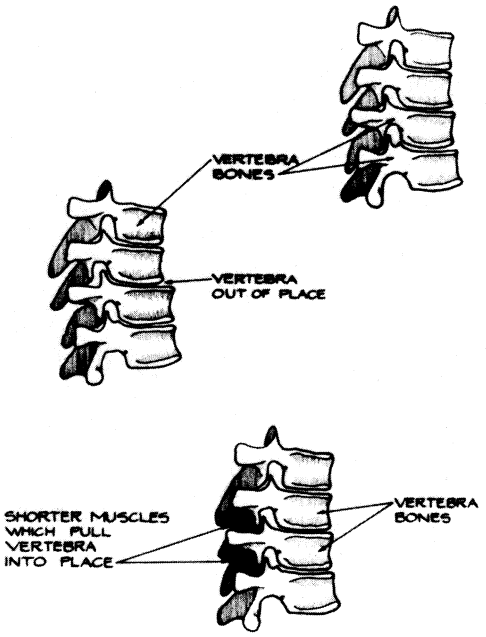

Plate 14

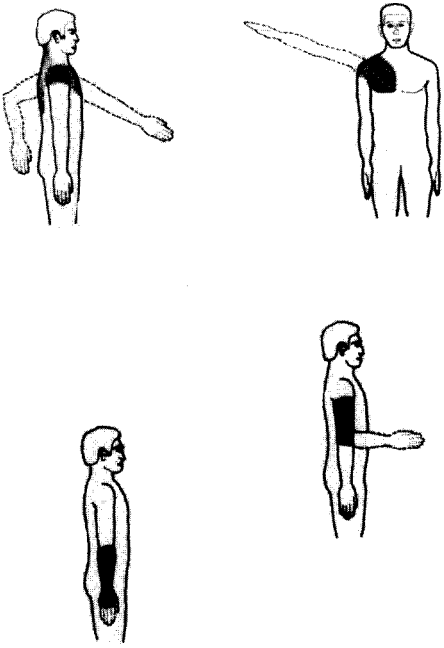

Plate 15

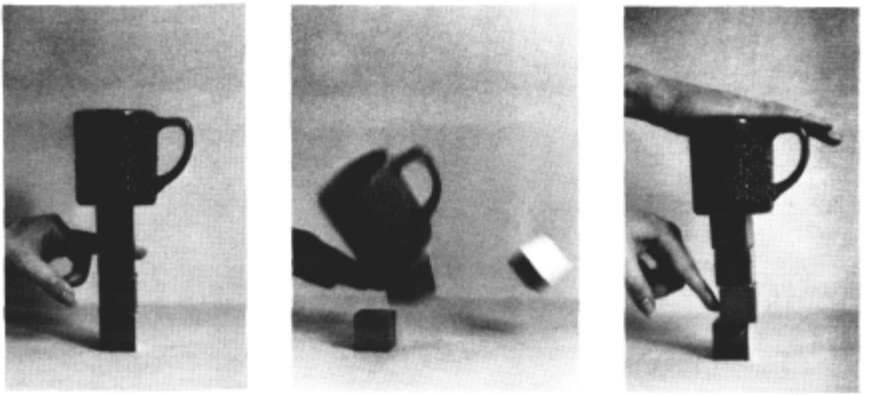

Plate 16

As can be seen in plate fifteen, muscles in the chest, shoulders and back operate the upper arm. Muscles in the upper arm operate the lower arm. And muscles in the lower arm operate the hands and fingers. The legs are operated in a similar manner.

Since the muscles on one side of a joint usually operate bones close on the other side of the joint, the same muscles can also do the job of keeping the bones tight in their joints. There are not many small bones close together between the ends of muscles in the arms and legs as there are in the spine; therefore medium and shorter muscles are not so much needed to position bones or keep them tight in their joints. There are some, but not many, medium and shorter length muscles in the hands and feet.

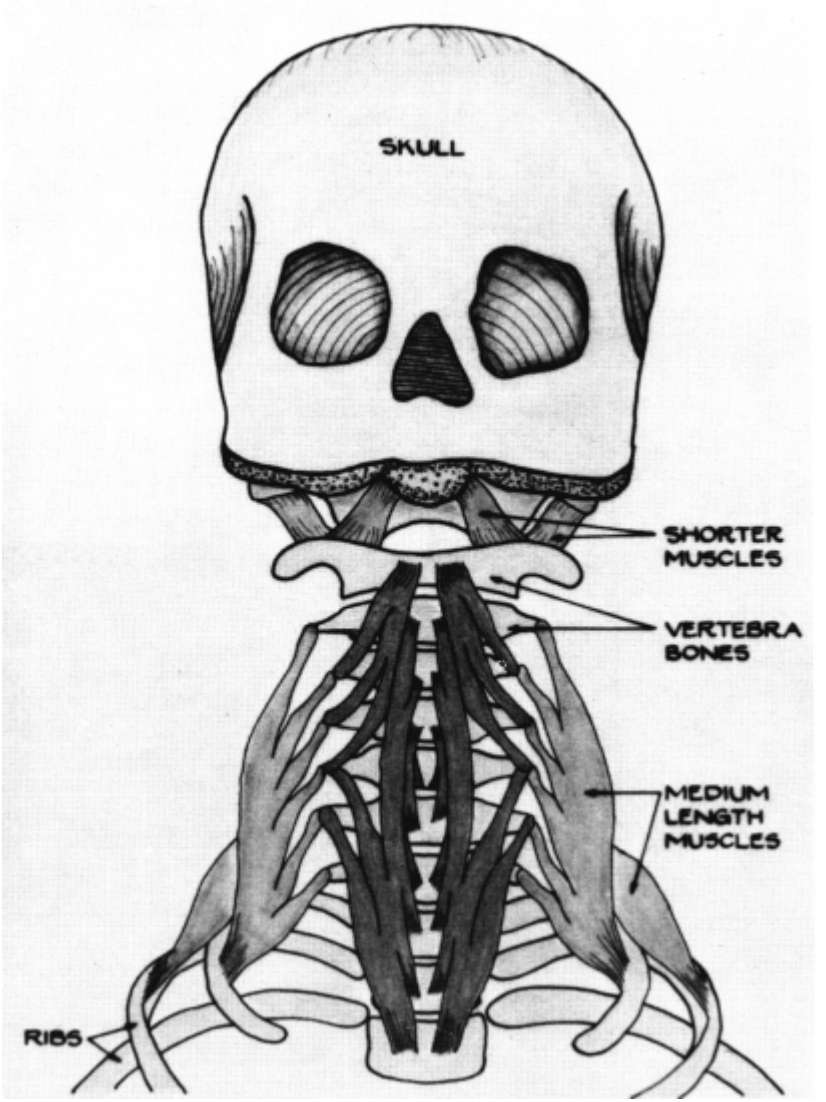
SKULL
SHORTER MUSCLES
VERTEBRA BONES
MEDIUM LENGTH MUSCLES
RIBS

Plate 18

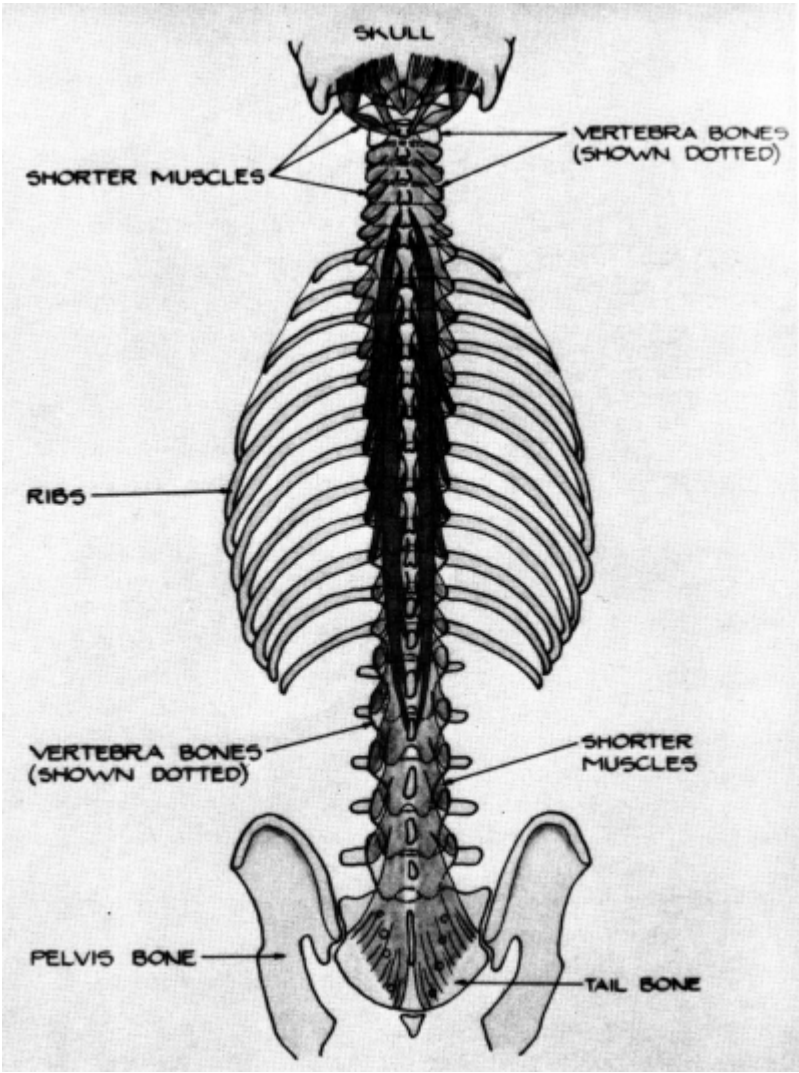
SKULL
VERTEBRA BONES
(SHOWN DOTTED)
SHORTER MUSCLES
RIBS
VERTEBRA BONES
(SHOWN DOTTED)
SHORTER
MUSCLES
PELVIS BONE
TAIL BONE

Plate 25