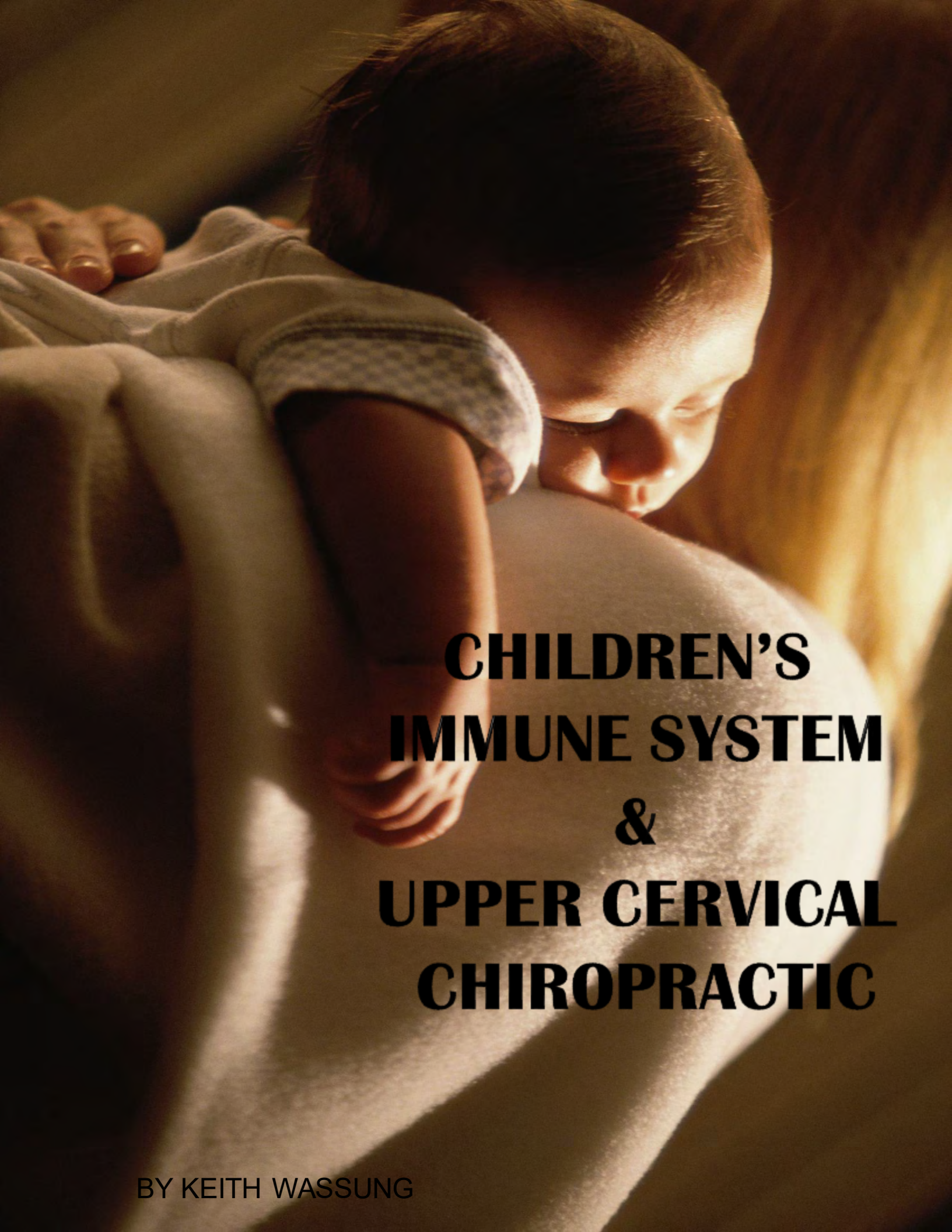


CHILDREN'S IMMUNE SYSTEM & UPPER CERVICAL CHIROPRACTIC

BY KEITH WASSUNG

Every parent wants a healthy child. Good health depends upon on a strong and properly functioning immune system.

A properly functioning immune system is one of the keys to a healthy, happy child who will resist infections, allergies, and chronic illnesses.

"The cornerstone of good health is a properly functioning immune system."[1]

DR. ANDREW WEIL

For the first time in history, U.S children are sicker than the generation before them. They're not just a little worse off, they are propitiously worse off physically, emotionally, educationally and developmentally.[2]

Judy Converse, MPH, RD, LD
Why Do Pediatricians Deny The Obvious?

Why Emerging Infectious Diseases Are a Threat to America

At least 170,000 Americans die annually from newly emerging and re-emerging infectious diseases, a number that could increase dramatically during a severe flu pandemic or yet-unknown disease outbreak. Factors including globalization, increased antimicrobial (drug) resistance, and climate and weather changes are contributing to the increased threat. [3]

TRUST FOR AMERICA'S HEALTH

Pressed by patients and advancing technology, health care will soon change its focus from treatment to enhancement, from repair to improvement, from diminished sickness to increased performance. The transformation has already begun. Accompanying this will be an increased emphasis on psychoimmunology, the science that deals with the mind's role in helping the immune system to fight disease, which will become a vitally important clinical field — perhaps the most important field in the 21st century.[4]

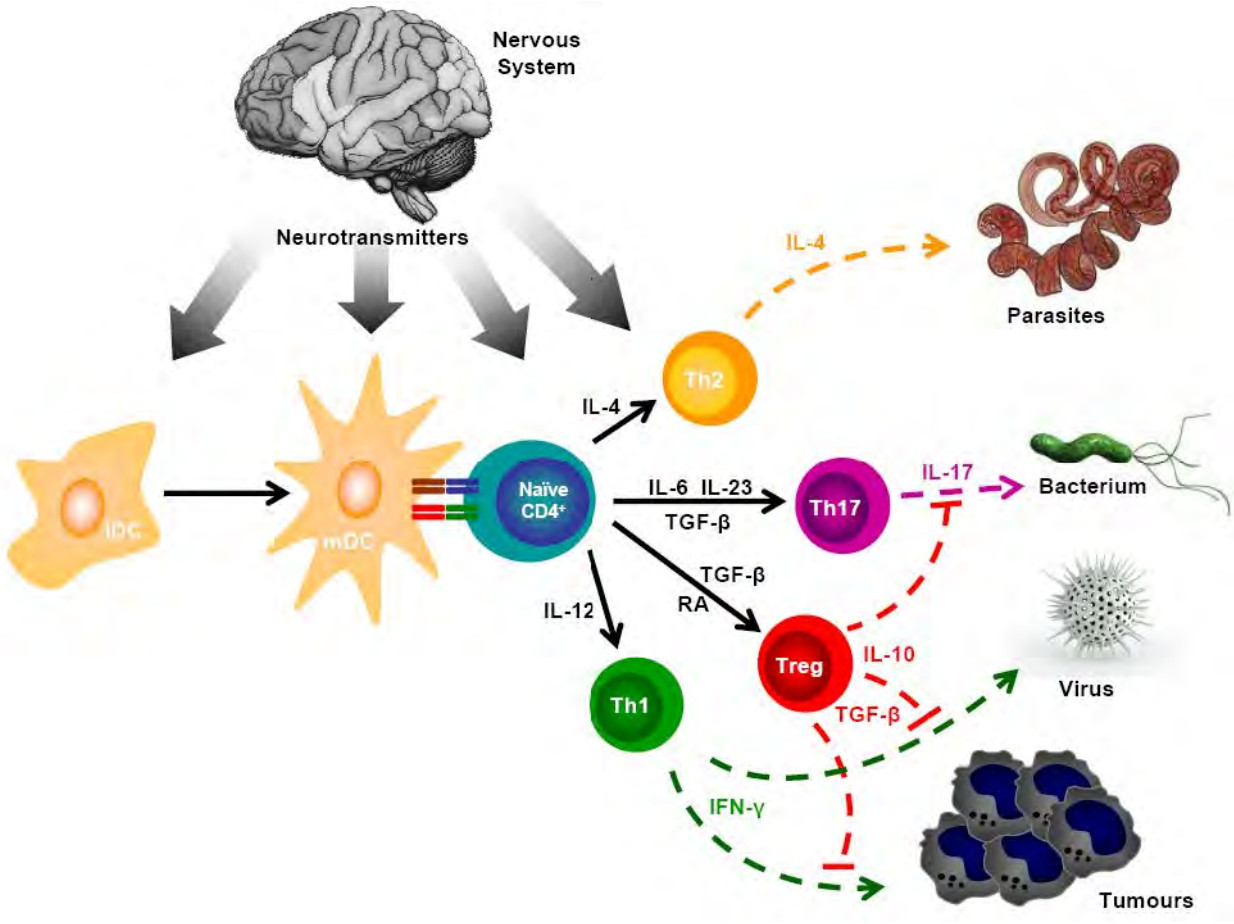
NEWSWEEK

We have learned much about the immune system in the past twenty-five years. much of it do to cancer and AIDS research and the information has prompted a shift away from treating illness to preventing it-and this approach begins with a focus on strengthening the immune system.

Strengthening the immune system of the entire family, starting with the children at birth, should be a top priority for all parents.

The immune system consists of the tonsils, adenoids, thymus, bone marrow, spleen, appendix, Peyer's patches, lymph nodes, and circulating white blood cells.

The job of the immune system is to protect and defend the body against infection from disease-producing microorganisms such as viruses, bacteria, fungi, and parasites that live in our environment.

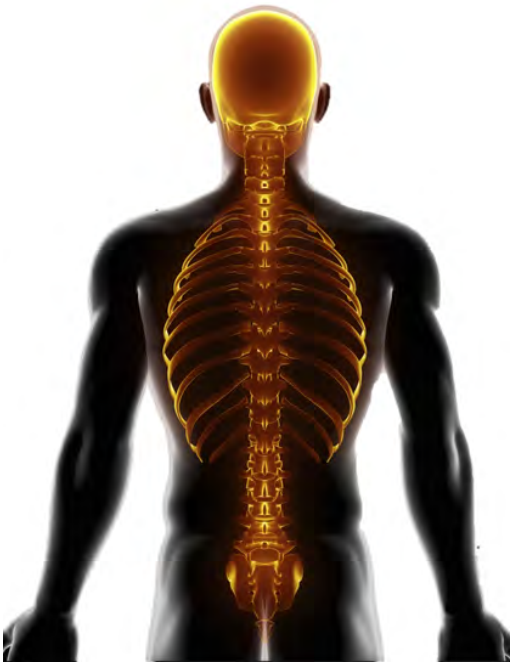


MANY OF THE CHARACTERISTIC SYMPTOMS OF ILLNESS, FROM NASAL DISCHARGE TO FEVER AND SWOLLEN GLANDS, ARE SIGNS THAT THE NORMAL IMMUNE RESPONSE IS PROCEEDING ON SCHEDULE.

“Symptoms represent the body's best efforts to heal itself. By treating symptoms, you are suppressing the body's natural response and inhibiting the healing process. Instead of treating symptoms, doctors should stimulate the body's defenses to allow for completion of the healing process.” [5]

DR. STEPHEN CUMMINGS

"The focus of science has shifted from separate entities of the immune system to an interactive immunology model. In the neural-immune concept, the brain has specific, two-pathways to the immune system." [6]



THE LANCET

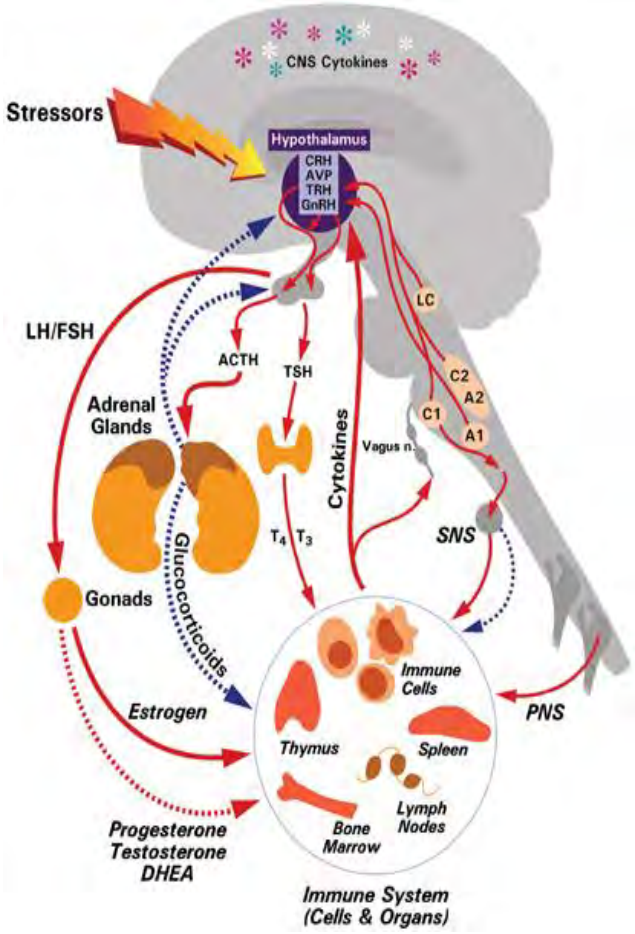
"It used to be dogma that the brain was shut away from the actions of the immune system, shielded from the outside forces of nature. But that's not how it is at all. It turns out that the brain talks directly to the immune system, sending commands that control the body's inflammatory response to infection and autoimmune diseases." [7]

Medical News Today

"The nervous system plays an important role in both the control and activity of the immune response. The sheer power of the brain to affect the body as a whole and general state of health is amazing." [8]

HUMAN ANATOMY AND PHYSIOLOGY

Dr. Robert Ader, a psychologist at the University Of Rochester School Of Medicine, performed the key experiments to prove the brain-nervous system immunes system connection. The following summarizes the essential evidence of the connection between the brain, the nervous system, and the immune system:



- **NERVE ENDINGS ARE FOUND IN THE TISSUES OF THE IMMUNE SYSTEM**.

  The central nervous system is linked to both the bone marrow and thymus, where immune system cells are produced and developed and to the spleen and lymph nodes, where those cells are stored.

- **CHANGES IN THE CENTRAL NERVOUS SYSTEM ALTER IMMUNE RESPONSES AND TRIGGERING AN IMMUNE RESPONSE ALTERS CENTRAL NERVOUS SYSTEM ACTIVITY**.

  Researchers have found that inducing an immune response causes nerve cells in the hypothalamus to become more active and the brain cell activity peaks at precisely the same time that levels of antibodies are at their highest. The brain monitors immunological changes closely.

- **LYMPHOCYTES ARE CHEMICALLY RESPONSIVE TO HORMONES AND NEUROTRANSMITTERS.**

  Immune system cells have receptor-molecular structures on their surfaces that allow them to receive information from the nervous system and other parts of the immune system.

Nervous and Immune System Disorders Linked in a Variety of Diseases

Recent advances in understanding a variety of diseases reveal complex interactions between the nervous system and the immune system. Neurological complications are associated with a breakdown in normal immune system functioning. According to Edward Goetzl, of the University of California in San Francisco, "there was always a sense that the nervous system is involved in disease, so the idea of a link between the nervous system and the immune system is not new. [9]

SCIENCE

The nervous system controls the entire growth and development of the immune system. An infant's immune system is immature at birth; fortunately, a newborn carries passive immunity from the mother for the first several months of life.

Breastfeeding provides the infant with the antibodies and immune enhancing factors that develop the immunity. A baby's lymphocytes are not yet capable of producing all the antibodies necessary to fight disease. A baby acquires this ability over the first year of life.

Human breast milk is biologic specific, that is, each drop of milk is alive with millions of tiny white blood cells and immunoglobins (infection-fighting proteins) that circulate through the baby's body, ingesting and destroying harmful bacteria-like miniature pac-men.

As the infant is exposed to microorganisms, the lymphocytes start to make antibodies and memory cells so that when the baby comes into contact with those micro-organisms again, the baby will mount an immune response more quickly.

When babies put things into their mouths, this is a natural way of gradually exposing their immune systems to tiny antigens, which the immune system must attack and destroy — a process which strengthens and protects the immune system

“Through the process of developing and then conquering infection, the child gets rid of acquired toxins and poisons from the body and also gets a generous boost to the immune system.” [10]

HEALING ARTS PRESS

“Whenever the immune system deals successfully with an infection, it emerges from the experience stronger and better able to confront similar threats in the future. Our immune system develops in combat. If, at the first sign of infection, you always jump in with antibiotics, you do not give the immune system a chance to grow stronger.” [11]

ANDREW WEIL, M.D.

Antibiotics have become a popular weapon in the medical arsenal against disease. Although no one would argue with the appropriate use of antibiotics, there is a tremendous amount of research which clearly demonstrates that they have been overused, resulting in weaker immune systems and resistant bacteria.

Antibiotics Overused, Doctor Says

Doctors too often prescribe antibiotics, which can cost a lot of money and cause serious side effects when the medicines won't help. About 60% of people with colds received antibiotics, even though the pills would not kill or even slow the viruses that cause colds. Studies of children in day care showed that 54% of the youngsters with ear infections had a penicillin resistant form of the streptococcus that commonly causes children's ear infections. Sixty percent of children with ear infections had a form of resistance to at least one type of antibiotic.[12]

"We're at the point where the antibiotic cupboard is almost bare. We are victims of our own blindness. We have been taking too many of them and new, deadlier organisms, like the powerful drug-resistant tuberculosis strain, have been emerging as a result." [13]

JEFFREY FISHER, M.D.

"Chronic middle ear problems in children have not diminished, despite the number of antibiotics being used to treat them. We have created a whole new kind of ear problem. We have used antibiotics so excessively in the first year of life that we have depressed the development of the child's immune system." [14]

WALTER BELENKY, M.D.

Infections caused by resistant microorganisms often fail to respond to conventional treatment, resulting in prolonged illness and greater risk of death. About 440 000 new cases of multidrug-resistant tuberculosis (MDR-TB) emerge annually, causing at least 150 000 deaths. [15]

WORLD HEALTH ORGANIZATION

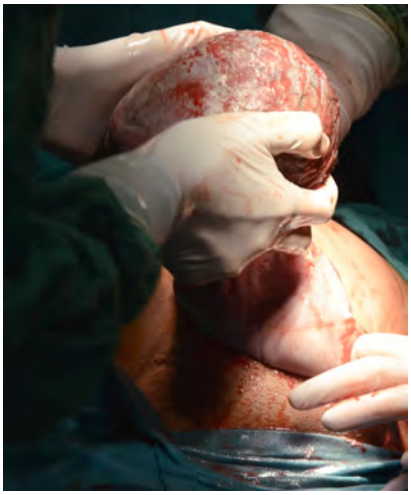
"Antibiotic therapy is not an effective treatment against otitis media (ear infection) and rates of recurrent infections are significantly higher in children who have been treated with antibiotics." [16]

JOURNAL OF THE AMA

A properly functioning nervous system should be the first priority in strengthening the immune system since it is the nervous system which controls all of our bodily functions. The nervous system works by sending and receiving nerve messages or impulses to all parts of the body.

The nervous system is protected by the spine, consisting of 24 moveable vertebrae. When the spine is in its proper position, it protects the nerve pathways.

But when vertebrae become misaligned, interference to the nerve impulses occurs — which reduces the overall functioning of the nervous system and of the particular organ to which it is assigned. These spinal misalignments are known as "vertebral subluxations."



The birth process, even under normal conditions, is frequently the first cause of spinal stress. After the head of the child appears, the physician grabs the baby's head and twists it around in a figure eight motion, lifting it up to receive the lower shoulder and then down to receive the upper shoulder. This creates significant stress on the spine of the baby.

“Spinal cord and brain stem traumas often occur during the process of birth but frequently escape diagnosis. Infants often experience lasting neurological defects. Spinal trauma at birth is essentially attributed to longitudinal traction, especially when this force is combined with flexion and torsion of the spinal axis during delivery.” [17]

ABRAHAM TOWBIN, M.D.

“It might seem that birth by C-section would be the easiest and least traumatic way to be born since the infant doesn't have to hazard the rigors of a long labor or a constricting birth canal. Unfortunately, we have found that trauma to the newborn delivered section is different but no less traumatic than the trauma that occurs in a vaginal delivery.” [18]

ARTHUR JANOV, M.D.

Most investigators in the past, in pursuing the problem of birth injury of the central nervous system, have been preoccupied with pathological changes in the forebrain. It is evident, however, that for the newborn, elementary biological activity is not dependent on the presence and function of the cerebrum. Survival of the newborn is governed mainly by the integrity and function of the vital centers in the brain stem. Yet, paradoxically, the importance of injury at birth to the brain stem and spinal cord are matters which have generally escaped lasting attention. Regrettably, in many institutions in which autopsies of newborns are performed, examination of the spinal structures is not carried out routinely; spinal injuries are thus often overlooked. [19]

ABRAHAM TOWBIN, M.D.

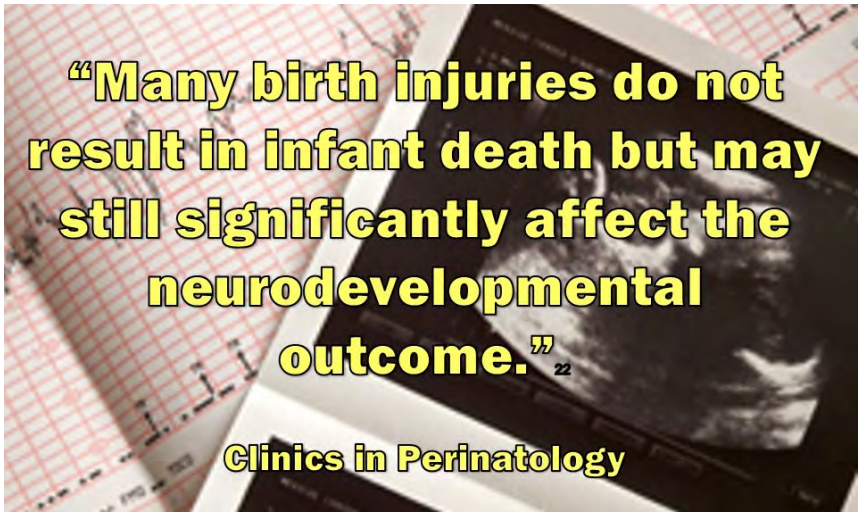
Birth trauma to the cervical spine and cranium can result in disorders such as: headaches, vestibular problems, auditory troubles, visual disturbances, pharyngolaryngela disorders, vasomoter and secretion dysfunction and psychic disturbances. Care to realign the neck achieves excellent results with many of these dysfunctions. [20]

Orthopedic Medicine

In a research article in *Developmental Childhood Neurology,* Dr. Byers stated that the recognized causative factors to injury during the birth process are traction, rotational stresses, and hyperextension of the fetal head. Recognition of these factors is the basis for prevention of this terrible accident.[21]

"Life for the newborn depends upon the preservation and healthy functioning of the brain stem and spinal cord at the level of the upper neck." [23]

Abraham Towbin M.D.
Harvard Medical School



During the first two years of life, an infant often falls while learning to walk or can fall while tumbling off a bed or other piece of furniture.

Even the seemingly innocent act of playfully tossing babies up in the air and catching them often results in a whiplash"-like trauma to the spine.

Automobile accidents often involve the entire family, although infants often go unchecked because they have no obvious damage or symptoms.

Because of the structure of the infant's spine, spinal stretching from trauma is more likely to result in spinal cord trauma with nerve interference than it is in damage to the vertebral segments and soft tissue. This is frequently the cause of the first vertebral subluxation in the child's life.

The effects of vertebral subluxations have been well documented by leading scientists and researchers from all over world.

"Nerve dysfunction is stressful to the visceral nerve and other body tissues and the lowered tissue resistance modifies the immune response and lessens the overall capability of the immune system." [24]

SCIENCE

"Subluxations of vertebrae occur in all parts of the spine and in all degrees. When the dislocation is so slight as to not affect the spinal cord, it will still produce disturbance in the spinal nerves passing off from the foramina." [25]

DR. JAMES WODDERSEE, Neurosurgeon

"Pathological changes have been observed at the cellular level after experimental compression of neural structures. These include Wallerian degeneration, dystrophic axons and occasional loss of myleniated nerve fibers." [26]

R. B. DELAMARTER, M.D.

In an article published in the German medical journal, *Manuelle Medizine,* Dr. Gotfried Gutmann, a leading researcher in the field of manipulation medicine, reported on the examination and care of more than 1,000 infants and small children which revealed the following about spinal nerve interference and childhood immune disorders:

- Blocked nerve impulses in the cervical region can cause many clinical features from central motor impairment to lowered resistance to infections, especially in the ear, nose, and throat.
- Chiropractic examinations are of a "decisive importance" for diagnosis of this condition.
- Chiropractic can often bring about successful results because it aims at the cause of the problem.[27]

The science of Chiropractic is founded on the premise that a proper nerve supply is essential in controlling and regulating bodily function

“The earlier abnormal spinal function could be recognised and corrected in a child’s life, the greater the opportunity that child will have for neurological development.” [28]

Dr. David Heilig

Over sixty percent of all neurological development occurs after birth in the child’s first year of life.This is why it is important for your child to get adjusted during the first year of their life.

“Subluxation alone is a rational reason for Chiropractic care throughout a lifetime from birth.” [29]

LEE HADLEY, M.D.

A study, published in the *Chiropractic Research Journal*, compared the health and wellness of 200 children under Chiropractic care to 200 children under conventional medical care. The Chiropractic group had fewer ear infections, fewer allergies, fewer cases of tonsillitis and asthma. The health of the children under Chiropractic care was demonstrably superior to the children who had not received it.[30]

“Every newborn should receive a neck and spine examination and a Chiropractic adjustment if necessary. Is that idea too difficult to accept*?”* [31]

LENDON SMITH, M.D. Pediatrician

“By releasing stress on the nervous system, Chiropractic permits the immune system to function more effectively.” [32]

DR. IRVIN KORR

Studies that have measured the effect of Chiropractic treatment on the immune system have showed that Chiropractic may influence T and B lymphocytes, NK (Natural Killer) cell numbers, antibody levels, phagocytic activity, and plasma bet-endorphin levels. [33]

Recent research by Patricia Brennan, Ph.D., suggests that spinal adjustments may have a direct effect on certain aspects of immune function.

Her group showed that when the thoracic spine (middle of back) was adjusted, the respiratory burst cycle of white blood cells was enhanced. [34]

A recent study by Dr. Ron Pero, a leading cancer and genetic research specialist, found that chiropractic patients of all ages had a 200% greater "immune competence" than people who had never received Chiropractic care and a 400% greater immune competence than people with serious diseases.[35]

CONCLUSION

Doctors of Chiropractic have been correcting subluxations in patients for over one hundred years, which has resulted in the recovery of virtually every known health problem. It is important to remember that all healing is ultimately self-healing and that a Chiropractor simply removes the interference (subluxation) from the master control system of the body.

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THE EDUCATION AND TRAINING OF A DOCTOR OF CHIROPRACTIC

Educational requirements for doctors of chiropractic are among the most stringent of any of the health care professions. The typical applicant at a chiropractic college has already acquired nearly four years of pre-medical undergraduate college education, including courses in biology, inorganic and organic chemistry, physics, psychology and related lab work. Once accepted into an accredited chiropractic college, the requirements become even more demanding — four to five academic years of professional study are the standard. Because of the hands-on nature of chiropractic, and the intricate adjusting techniques, a significant portion of time is spent in clinical training.

Doctors of chiropractic — who are licensed to practice in all 50 states, the District of Columbia, and in many nations around the world — undergo a rigorous education in the healing sciences, similar to that of medical doctors. In some areas, such as anatomy, physiology, rehabilitation, nutrition and public health, they receive more intensive education than their MD counterparts.

Like other primary health care doctors, chiropractic students spend a significant portion of their curriculum studying clinical subjects related to evaluating and caring for patients. Typically, as part of their professional training, they must complete a minimum of a one-year clinical-based program dealing with actual patient care. In total, the curriculum includes a minimum of 4,200 hours of classroom, laboratory and clinical experience. The course of study is approved by an accrediting agency which is fully recognized by the U.S. Department of Education. This has been the case for more than three decades.

Records from insurance and court cases have constantly shown that chiropractic is the safest portal of entry health care available to the public today. Although no healthcare procedures are 100% safe, chiropractic stands on its record of safety and effectiveness unmatched in healthcare.

The chiropractic adjustment is a safe, efficient procedure which is performed nearly one million times every working day in the United States.

There is a singular lack of actuarial data that would justify concluding that chiropractic care is in any way harmful or dangerous. Chiropractic care is non-invasive, therefore, the body's response to chiropractic care is far more predictable than its reactions to drug treatments or surgical procedures. Of the nearly one million adjustments given every day in this country, complications are exceedingly rare.

COMPLIMENTS OF

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239 W. 520 N.
Orem, UT 84057
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