

PRINCIPLES OF REFLEXOLOGY

Reflexology is the practice of applying pressure to specific points on the feet and hands to influence the health of corresponding parts of the body.

“Pressure sensors” on the hands and feet connect with different parts of the body, and as reflexology techniques stimulate these sensors, waves of relaxation are sent throughout the body. In this section we outline the principles and history of reflexology, and reveal how it is used to aid health and encourage relaxation, prevent disease, reduce pain, and improve quality of life.

THE HISTORY OF REFLEXOLOGY

The modern practice of reflexology has its origins in the 19th century and became fully developed in the 1930s, when Eunice Ingham and others devised charts of reflex zones for the hands and feet. However, archeological evidence suggests applying pressure to the hands and feet is an ancient tradition. There are Egyptian pictographs dating from 2330 BCE, for example, which depict work on the feet and hands.

Although the exact terminology and principles used remain unrecorded or have been lost during the course of history, archaeological artifacts demonstrate that the clear intent of some healers in ancient societies was to better health and prevent disease by applying pressure to the feet and hands.

ANCIENT EGYPT

Artifacts found in Egypt offer the clearest evidence of foot-work in ancient history. For example, at the entrance to the Tomb of the Physician Ankhmahor at Saqqara is a pictograph dating from 2330 BCE depicting work on the feet and hands. The prominent placement of such a pictograph on a tomb usually denotes

Artifacts show clearly that in ancient Egypt foot-work was considered a medical practice.

activities associated with the inhabitant's livelihood. One might infer that this person was a physician who practiced foot-work. Intriguing to reflexologists is the translation of the hieroglyph, "Do not let it be painful" and "I do as you say"—similar interchanges still take place in reflexology practices today.

Another pictograph, found at the temple of Amon at Karnak, commemorating a military victory of Ramses II, who reigned 1279–13 BCE, shows a healer tending to

the feet of foot soldiers at the battle of Qadesh. This military campaign of 1276 BCE involved a long march, and, presumably, many foot-sore soldiers. Such pictographs make perfect sense to reflexologists, who often find themselves fighting the battle of tired feet on behalf of foot-sore clients. Historians record that Roman military leader Mark Antony (83–30 BCE) rubbed the feet of the Egyptian Queen Cleopatra VII (69–30 BCE); Emperor Octavian (62–14 CE) writes of Antony's "pathetic enslavement... he even massaged her feet at dinner parties." To reflexologists, the image of Antony working on his lover's feet conjures an image of one person reaching out to another, bypassing words.

ANCIENT CHINA

Traditional Chinese Medicine (TCM) attributes good health to the free flow of *qi* energy through the body along energy channels, or meridians, which begin and extend down to the feet and hands, and can be manipulated to ensure a well-balanced flow through pressure on vital points. The Chinese first began using the concept of reflexology roughly 5,000 years ago. *The Method of Toe Observations*, recorded around that time in a Chinese medical text, the *Hwang Tee Internal Text*, attests to interest in the foot and its connection to

Some of the earliest evidence of foot-work comes from ancient Egypt, such as this relief from the chapel of the Vizier Ptahhotep II at Saqqara, dated c. 2350 BCE.



This 1st-century BCE Indian carving of Buddha's "foot-prints" symbolizes the "grounding of the transcendent." The feet have long been a focus of respect in India.

OTHER CULTURES

Beliefs of many ancient cultures in diverse parts of the globe illustrate the special role of the foot in their societies. As Barbara Walker writes in *The Woman's Dictionary of Symbols and Other Sacred Objects* (1988), "Egyptians, Babylonians and other ancient people considered it essential to step on sacred ground with bare feet to absorb the holy influences from Mother Earth." Even now, the Kogi tribal people who live in Colombia in South America have a similar ancient belief. They consider that footwear cuts off their contact with Mother Earth. As a result, the Kogi today still go barefoot. In addition in Russia, the idea of walking barefoot on natural surfaces to benefit the body prevails, while many societies in Asia, Africa,

Germany, and India have customs that involve work on the feet for health purposes. These examples suggest that many traditional societies see the foot as a conduit to spirituality and general wellness.

WESTERN IDEAS

The concept of reflexology as a medical therapy began to emerge in the 19th century, based on research by Western scientists and medical practitioners into the nervous system. Their basic discovery—that one can influence health and well-being through reflex actions—established the basis of all reflexologists' practice today.

The nervous system detects and interprets information from the outside world, and initializes the body's response to it. As part of their work, medical researchers in the 1800s studied the concept of the reflex and determined that it was "an involuntary response to a stimulus." They then began to explore the idea of "reflexes" and their effect on the body's state of health. Heat, cold, plasters, and herbal poultices were applied to one part of the body—the reflex area—with the goal of influencing another part of the body. For example, a poultice applied to the surface of the skin on the chest was shown to influence the lungs beneath. The concept of "zones of influence"—in which an action performed on one part of the body causes a reaction in another part of the body—sought to explain such phenomena. As one of the many medical articles of the time expounded, "Reflex Action (is seen) as a Cause of Disease and (a) Means of Cure."

BRITISH DEVELOPMENTS

In 1893 Sir Henry Head (1861–1940) made a breakthrough in the understanding of the nervous system. He discovered that areas of hyperalgesia on the surface of the body (skin that is abnormally sensitive to pain) could occur as a result of a diseased internal organ. The connection, he found, was that the organ and area of skin were served by nerves emanating from the same segment of the spinal cord. His model

showing how the skin and parts of the body are linked became known as “Head’s Zones”; areas of skin linked by the nervous system to other parts of the body are now called “dermatomes.” Doctors were able to refine their knowledge of this model in World War I (1914–18), observing that bullet wounds could cause pain not only in the damaged part of the body but all along the relevant nerve pathway.

RUSSIAN DEVELOPMENTS

Nobel Prize winner Ivan Pavlov (1849–1936), showed that dogs’ internal organs could be conditioned to respond to certain stimuli. This led Russian physicians of the early 1900s to form the hypothesis that health can be affected in response to external stimuli. This concept became known as “reflex therapy”: physician Vladimir Behterev (1857–1957) coined the term “reflexology” in 1917. Physician-researchers of the time believed that an organ experienced illness because it received wrong instructions from the brain. According to this theory, by interrupting such “bad” instructions, a reflex therapist could prompt the body to return to health. Influencing health through reflex action is a concept that survives in some medical practice today.

ZONE THERAPY AND BEYOND

American physician William Fitzgerald (1872–1942) launched similar ideas in the United States. Influenced by a visit to England in the early 1900s, he observed that direct pressure could produce a pain-relieving effect. He taught that the application of pressure to a finger or toe representing one of the body’s ten zones could lessen pain in the corresponding body area. Dr. Fitzgerald named this zone therapy (*see box*), and some contemporary physicians accepted his theory,

In several cultures the foot is considered to be a conduit to spirituality and general wellness.

WHAT IS ZONE THERAPY?

Dr. William Fitzgerald’s zone therapy divided the body into ten longitudinal zones that run from the top of the head down the body to the feet. There are five zones on each side of the body, each one branching off down the respective arm and encompassing one digit on the hand, and also continuing straight down the body and down the respective leg to align with a toe on the respective foot.

using it to treat illness and as an anesthetic during minor surgery. Controversy followed within the medical community, and while it flourished for a short period, zone therapy was displaced when modern drugs and surgical procedures became prevalent.

Dr. Fitzgerald’s ideas were continued in the early 20th century through the work of individuals such as Dr. Joseph Riley, his assistant, physiotherapist Eunice Ingham (1879–1974), and others, who added their own ideas to the simple ten-zone concept. Applying zone therapy’s basic principles to the feet, they added three lateral lines and further detail to create a map on the feet and hands showing which pressure points correspond to different parts of body.

In 1938, Eunice Ingham wrote her ground-breaking book *Stories the Feet Can Tell*, examining the reflex response when pressure was applied to the feet. She is credited with developing and keeping alive the ideas of zone therapy and reflexology. During her travels in the US, Canada, and Europe, Ingham introduced thousands of people to the practice of reflexology and her work is continued today by her nephew Dwight Byers in “Ingham Reflexology.”

Modern reflexology now flourishes throughout the world. In the UK, Doreen Bayley pursued Ingham’s work, while Hanne Marquardt continues the practice in Germany. Father Josef Eugster, a Jesuit parish priest in Taiwan, prompted a revival of the ancient Chinese traditions of foot-work in Asia in the 1980s.

HOW REFLEXOLOGY WORKS

Reflexologists use a series of pressure techniques to stimulate specific reflex areas on the feet and hands with the intention of invoking a beneficial response in other parts of the body. Reflexology maps (*see pp. 16–23*) show the various reflex areas and their corresponding body parts. This mirror image of the body in the feet and hands helps reflexologists and self-help practitioners alike easily target the correct part of foot or hand on which to work.

Pressure sensors in the feet communicate instantly with the brain, internal organs, and other body parts because of ancient survival needs: in extreme danger, when a reaction of fight or flight is necessary, the feet must be prepared to participate in defending or fleeing. They do this by processing environmental information gathered through pressure sensors in the soles, which helps the body determine optimal fuel and oxygen levels. The need to run, for example, requires more oxygen than

the big toe to the part of the brain responsible for controlling movement, respiration, and cardiac acceleration. So pressure applied to the center of the big toe, the pituitary gland reflex area, triggers a revival response.

HOW ZONES WORK

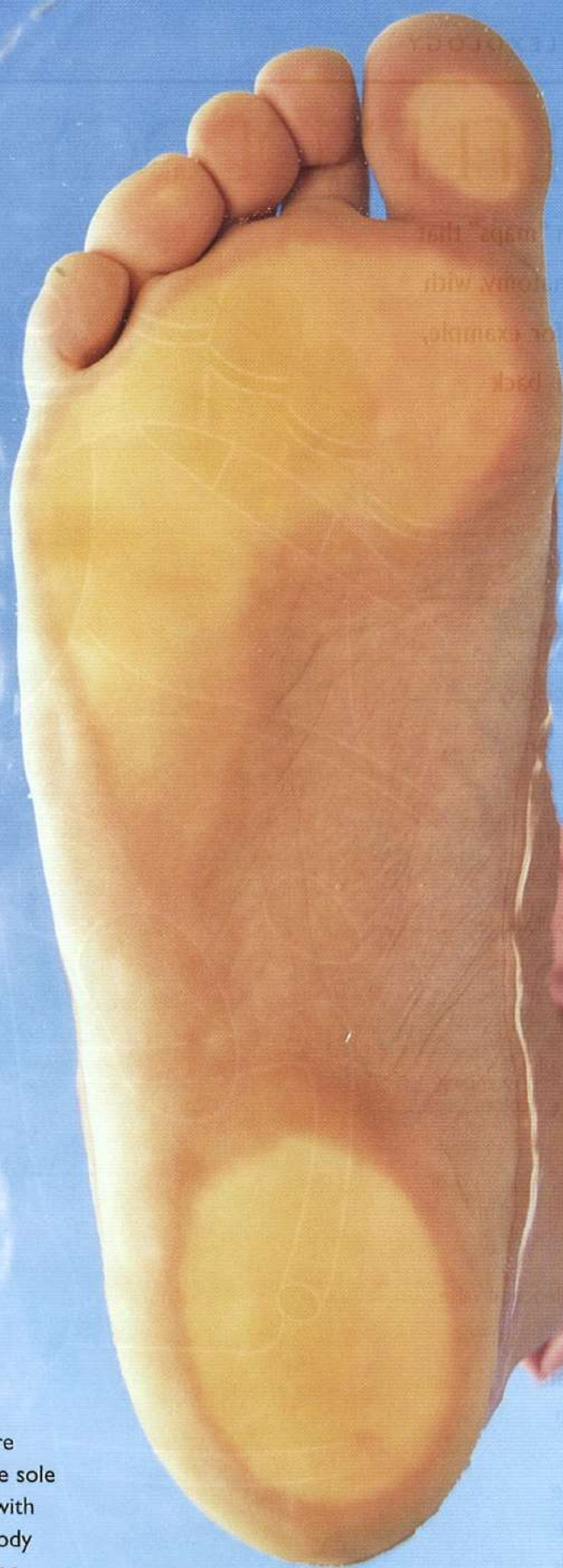
Zone theory (*see pp. 12–13*) established that the body can be divided into ten longitudinal zones running from the top of the head to the toes, and that all parts of a zone are connected. Tension in one part of the zone affects every part. By working any point of the zones, the hands and feet can release the tension and restore equilibrium to the entire zone and so to the body. Three lateral lines are also used by reflexologists to dissect the body, at the shoulders, diaphragm, and waist, and in the same proportions on the soles of the feet or palms of the hand. These help pinpoint more precisely which part of the foot or hand to target with reflexology: the big toe or thumb corresponding to the head, the pelvis surrounding the heels, and so on. The foot or hand thus becomes a three-dimensional map of the body.

HOW REFLEXES WORK

Imagine stepping on a tack. In response to the challenge to the sole of the foot, a reflexive action occurs throughout the body—muscular action withdraws the foot from the tack and the body experiences an adrenaline surge as well as changes in balance and internal organ function. Reflexology works on the same principle—it all happens reflexively throughout the nervous system.

The feet act as self-tuners for the rest of the body: movements of the feet stimulate the whole system.

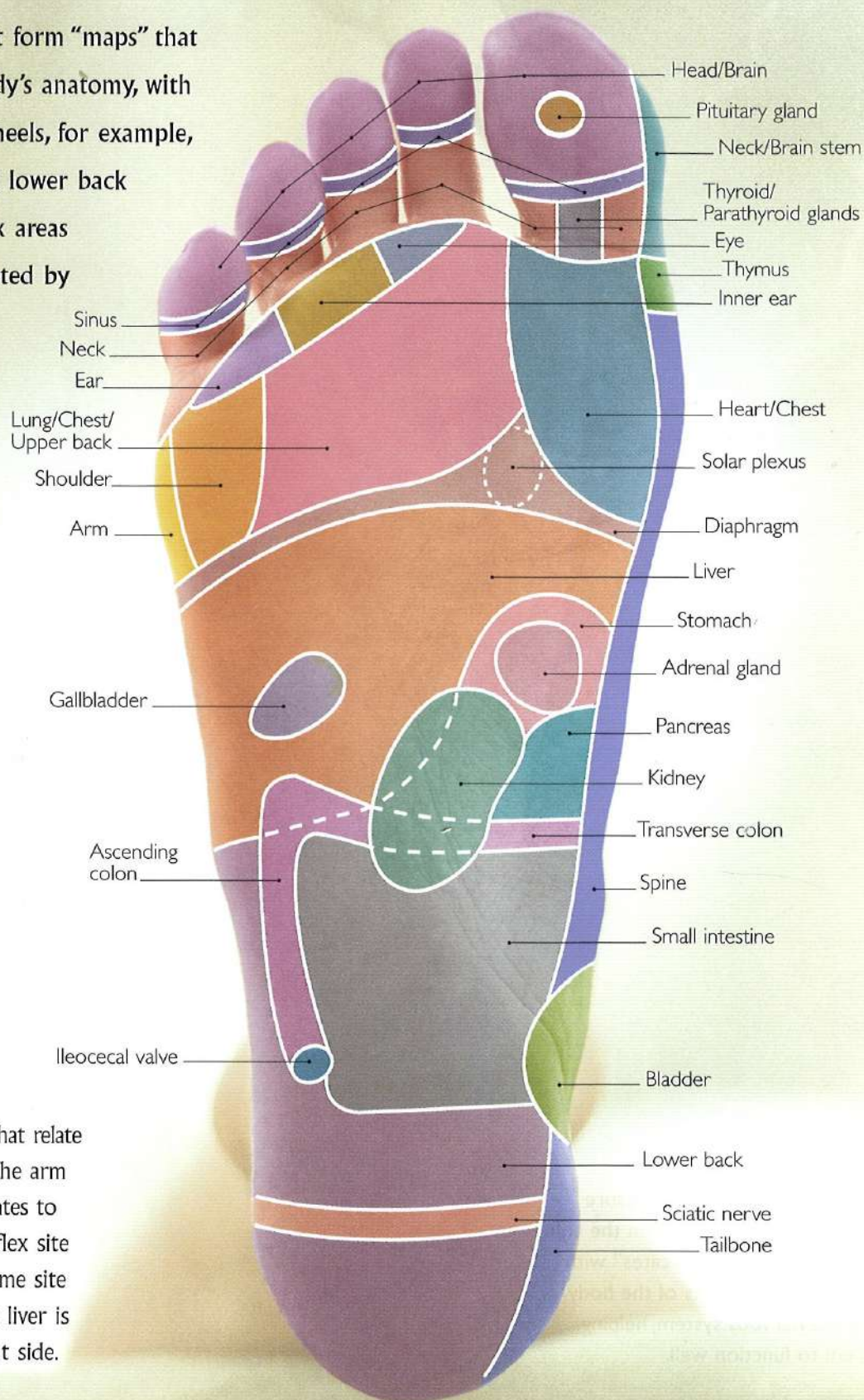
walking; feet ready to flee need different levels of fuel and oxygen than feet preparing to fight. So pressure signals from the soles tell the brain whether the body is standing, sitting, or lying down, which helps it decide whether blood-sugar, oxygen, muscle-contraction, and relaxation needs are currently being met. Consider what takes place during jogging. Pressure to the feet tells the brain the jogger is running. The body adjusts its organs to provide adequate energy. Over time, a jogger's body becomes conditioned to work better. Reflexology is weightless jogging, exercising similar pressure receptors without the demands of standing and weight-bearing. For example, a single nerve travels from the center of



Reflexologists believe pressure applied to reflex zones on the sole of the foot "communicates" with corresponding parts of the body via the nervous system, helping them to function well.

FOOT REFLEXOLOGY MAPS

Reflex areas on the feet form “maps” that approximate to the body’s anatomy, with areas on the toes and heels, for example, reflecting the head and lower back respectively. Some reflex areas overlap, which is indicated by broken lines.

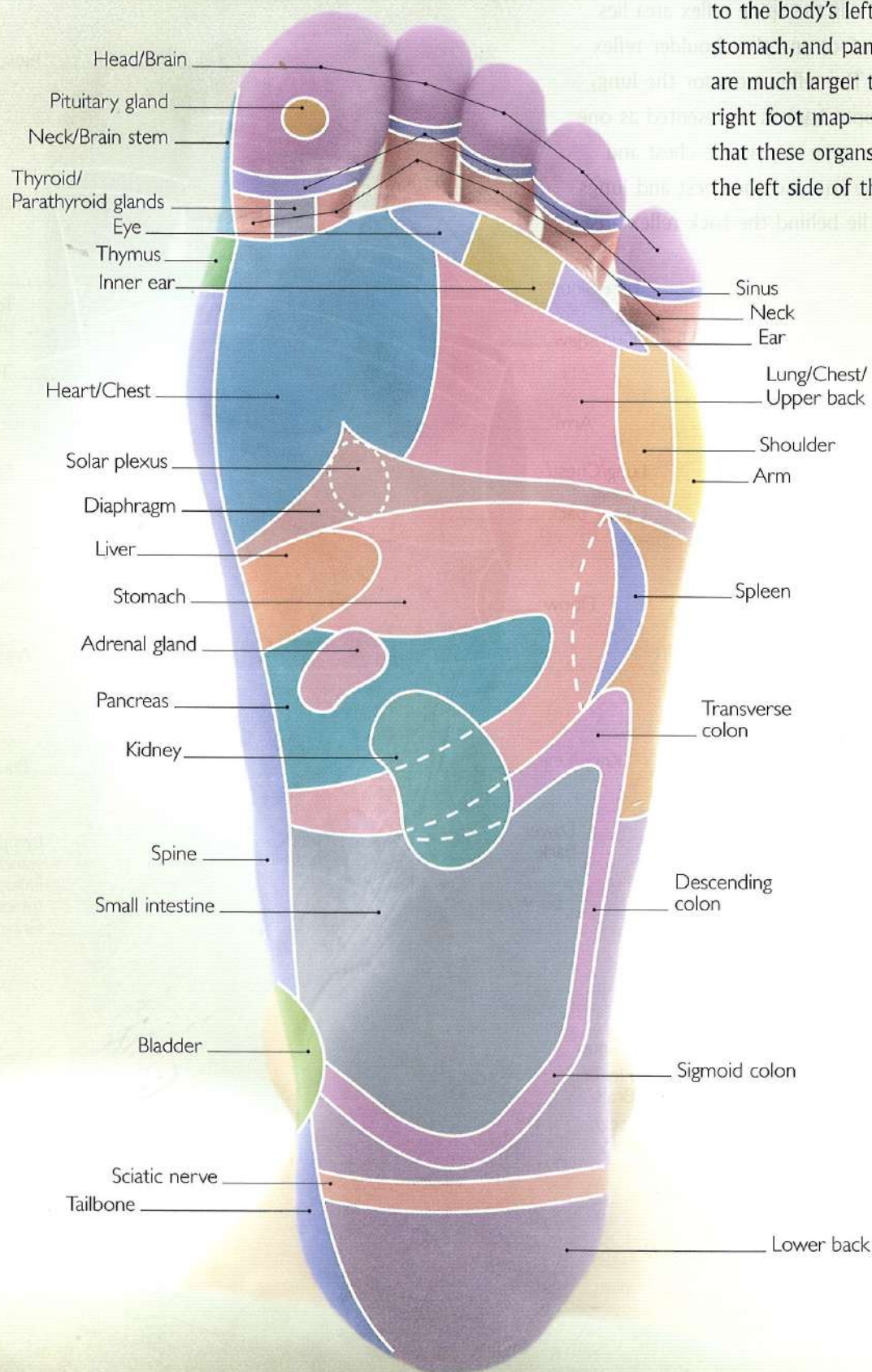


Right sole

This map has reflex areas that relate to the body’s right side. The arm reflex site, for instance, relates to the right arm. The liver reflex site is much larger than the same site on the left foot, since the liver is mostly on the body’s right side.

Left sole

Reflex areas on the left foot relate to the body's left side. The heart, stomach, and pancreas reflex sites are much larger than those on the right foot map—reflecting the fact that these organs are situated on the left side of the body.

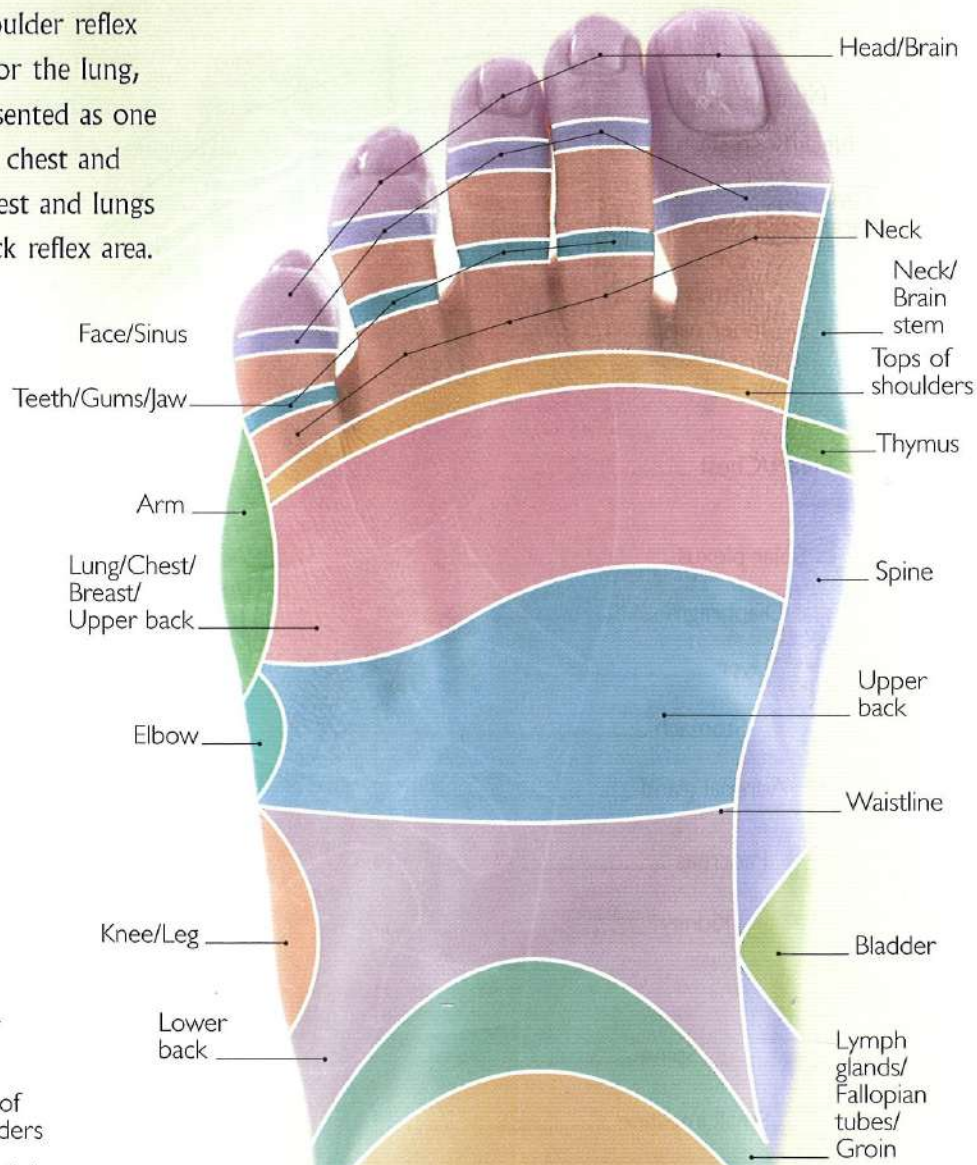
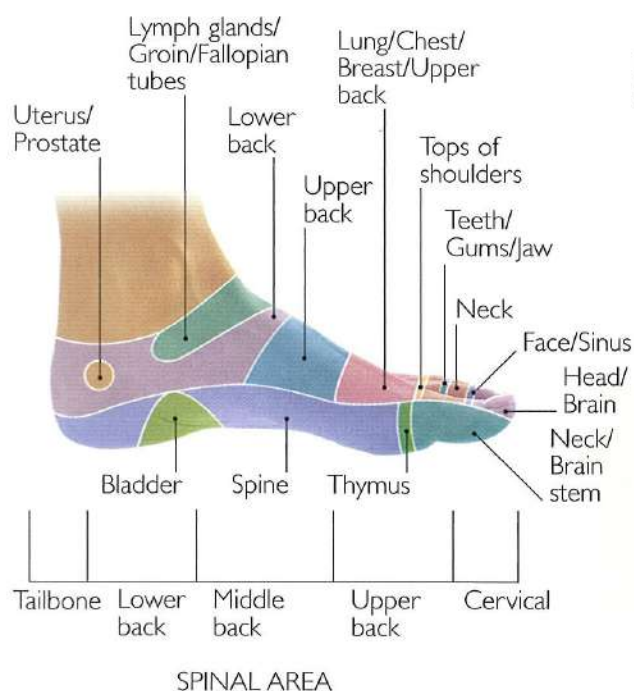


Top of left foot

The reflex areas shown relate to the left side of the body. To orient yourself, the spine reflex area lies on the inside of the foot and the shoulder reflex area on the outside. The reflex areas for the lung, chest, breast, and upper back is represented as one area. However, in the same way as the chest and lungs lie "behind" the back, so the chest and lungs reflex areas actually lie behind the back reflex area.

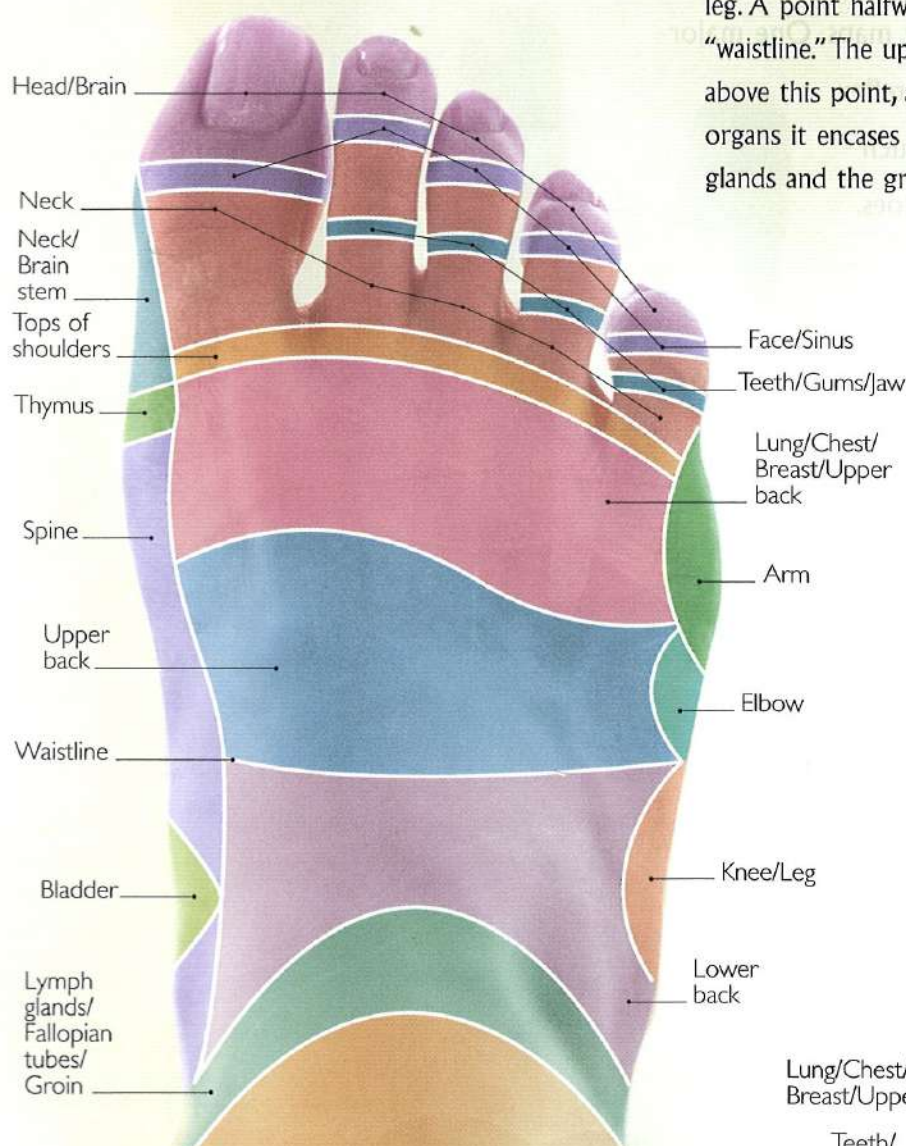
Inside

This view shows how the spine reflex area runs along the inside of the foot. The neck is represented at the big toe, the area between the shoulder blades in the ball of the foot, the lower back at the arch, and the tailbone at the base of the heel.



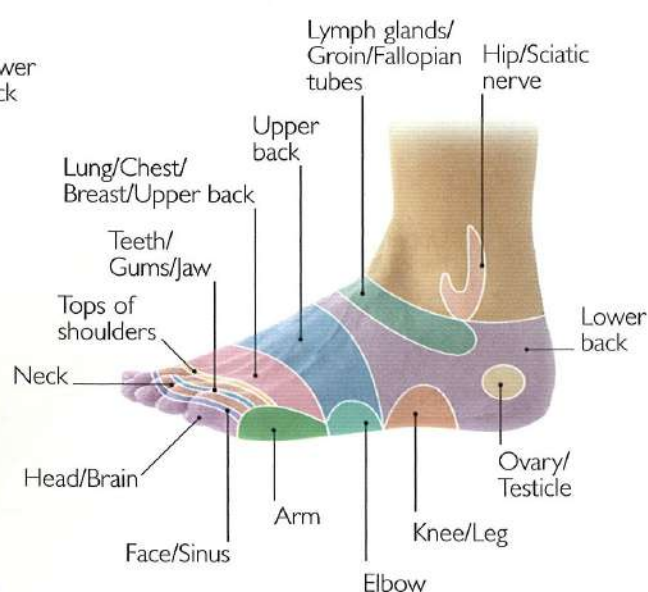
Top of right foot

On the top of the right foot are reflex areas relating to the right side of the body, such as the right arm and leg. A point halfway down the foot is known as the "waistline." The upper back and its organs are mapped above this point, and the lower back and the internal organs it encases are below this guideline. The lymph glands and the groin reflex areas wrap around the ankle.



Outside

The reflex area for the top of the shoulders runs across the toes, with the areas corresponding to the arm and elbow at the side of the foot. This view clearly shows the reflex areas for the reproductive organs and for the sciatic nerve and hip, which curves around the ankle bone.

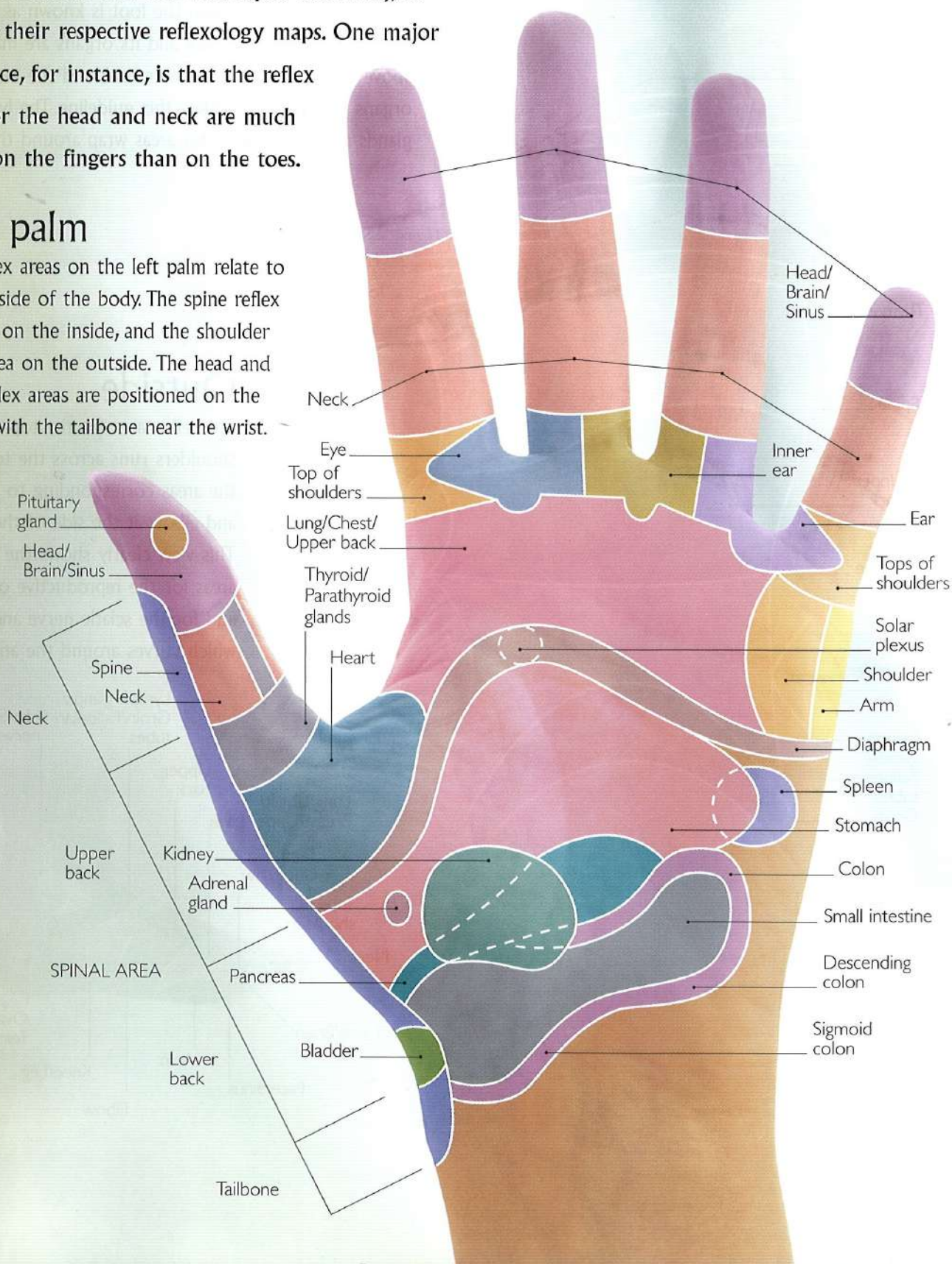


HAND REFLEXOLOGY MAPS

Just as the hands and feet are shaped differently, so too are their respective reflexology maps. One major difference, for instance, is that the reflex areas for the head and neck are much larger on the fingers than on the toes.

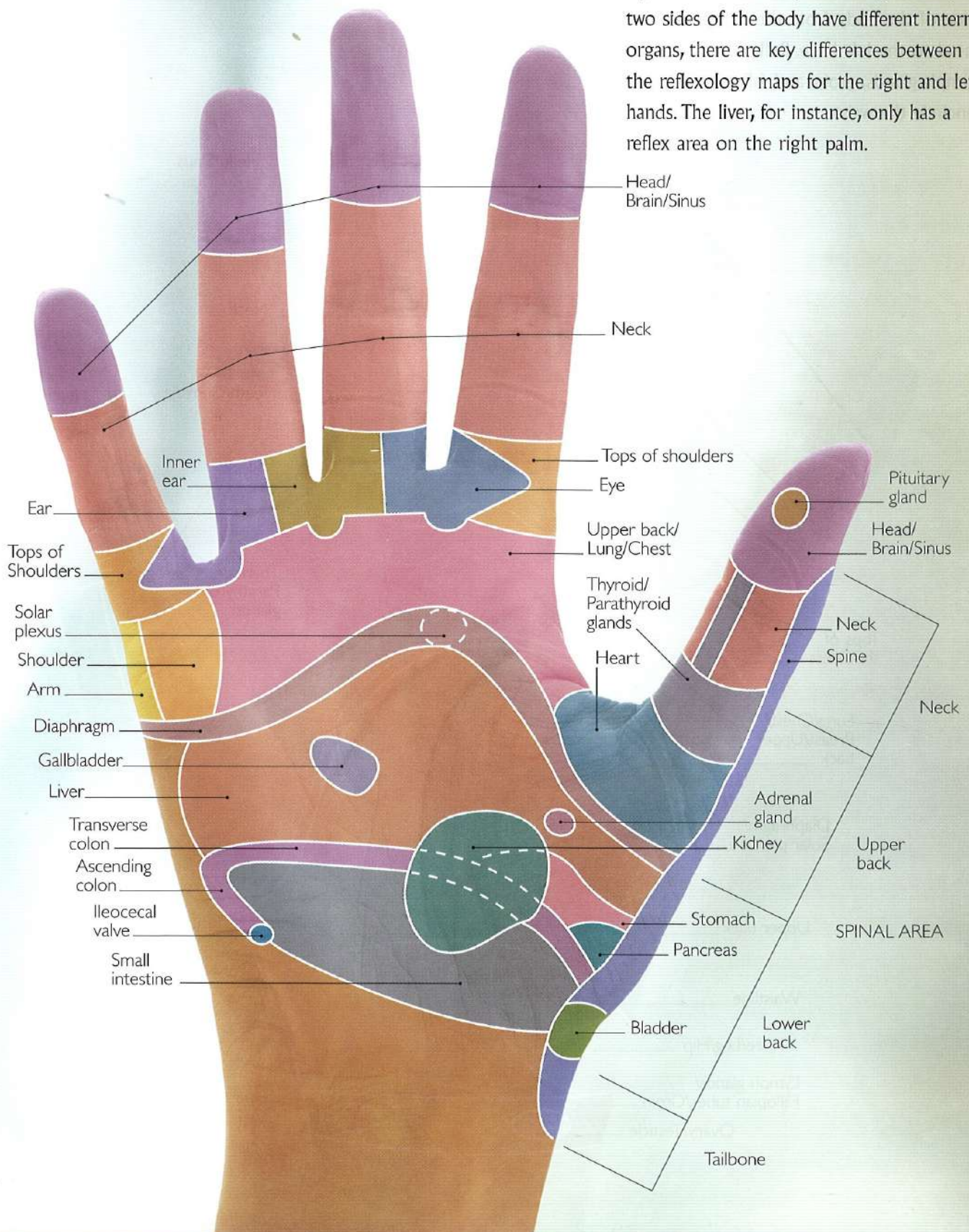
Left palm

The reflex areas on the left palm relate to the left side of the body. The spine reflex area lies on the inside, and the shoulder reflex area on the outside. The head and neck reflex areas are positioned on the fingers with the tailbone near the wrist.



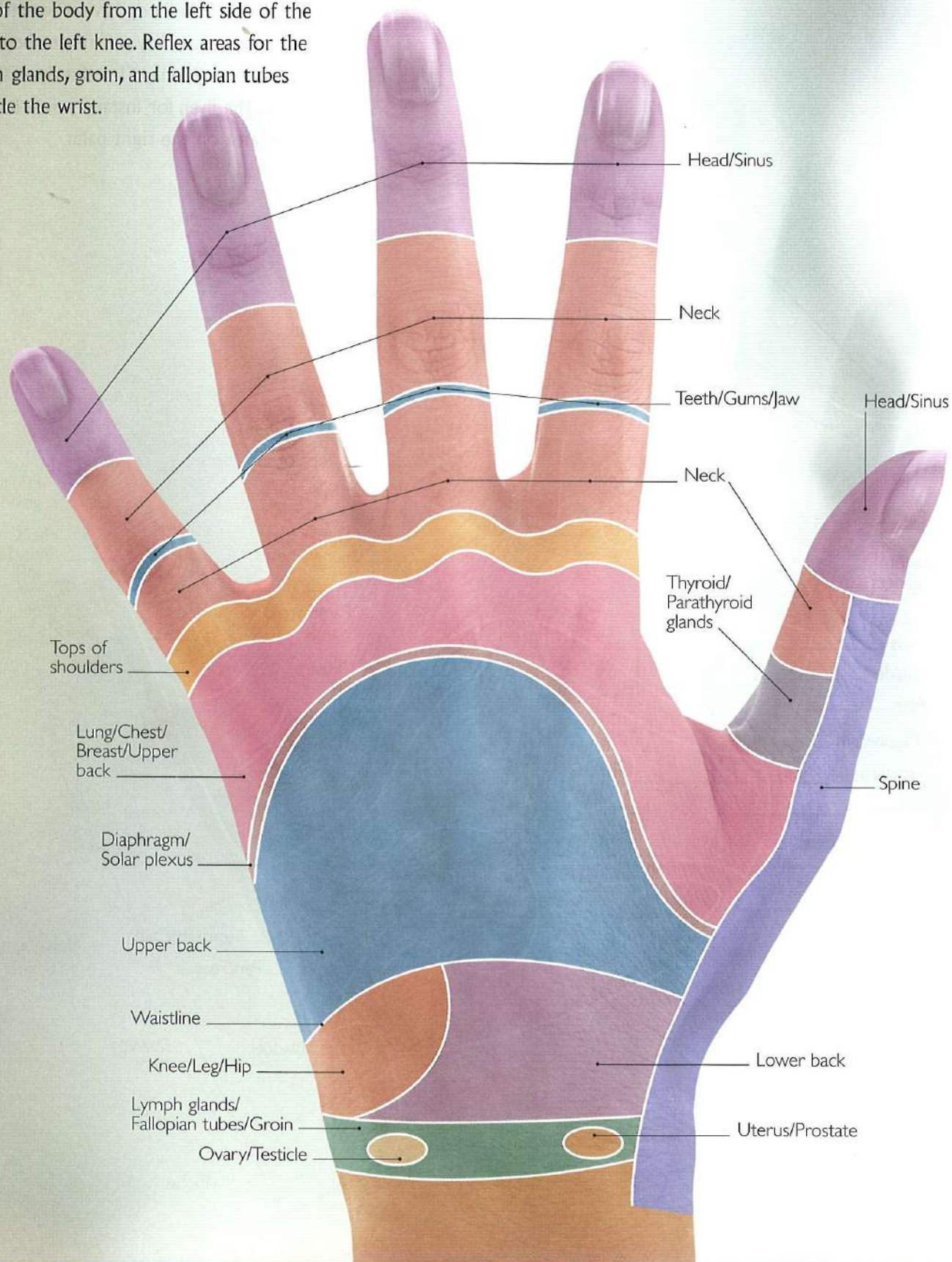
Right palm

Reflex areas on the right palm relate to the right side of the body. Mirroring the way the two sides of the body have different internal organs, there are key differences between the reflexology maps for the right and left hands. The liver, for instance, only has a reflex area on the right palm.



Top of left hand

The top of the left hand features a series of banded reflex areas, representing the left-hand side of the body from the left side of the head to the left knee. Reflex areas for the lymph glands, groin, and fallopian tubes encircle the wrist.



Top of right hand

To orient yourself, the reflex areas on the right hand relate to body's right side. At the base of the hand's long bones, is an invisible point—the "waistline." The upper back reflex area is above this point and the areas for the lower back, hips, and the internal organs they encase are below it.

