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Animal Advice: Hibernation Habits

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Imhotep: Demigod or Doctor?

By Anna Dardick

Long before the era of da Vinci, a Renaissance man emerged in ancient Egypt. Imhotep was an astrologer, priest, architect, engineer, vizier, scribe, and surgeon under four pharaohs of the Third Dynasty (around 2650 BCE). He engineered and supervised the construction of the step-pyramid of Saqqara, and is alleged to have erected the world's first hospital. Hundreds of years after these accomplishments, however, his reputation began transforming from that of a sage to that of a godlike figure. By the 26th Dynasty, Imhotep had undergone an apotheosis in Egyptian lore, becoming a fully-fledged god responsible for star movements, Nile flooding, fertility, protection from poverty, and protection from illness. Eventually, the Romans incorporated Imhotep into their own god of healing: Asclepius.

Time and legend have obscured Imhotep's true life in favor of his characterization as a mystical god—but who was the man behind the deity? Imhotep indelibly changed Egyptian medical history; one does not have to look further than the actual man to find godlike scientific achievements that have resonated throughout time.

As he was both an engineer and a doctor, Imhotep was uniquely qualified to write the first manual on occupational medicine (i.e. how to treat on-the-job injuries), now referred to as the Edwin Smith papyri. The Smith papyri provide examination advice, diagnoses, and treatments for traumas that were common among pyramid construction workers. The text illuminates the Egyptians' astonishingly accurate observations of phys-

iology, anatomy, and pathology. It mentions the use of sutures, cauterization, splints, and antisepsis with copper salts. The latter is especially intriguing due to the relative lack of understanding in the ancient world that cleanliness was integral to halting the spread of infection. Additional progress in antiseptic procedures would not emerge until the United States' Civil War, nearly 5000 years later.

It is unsurprising that the case studies detailed by the papyri are in very specific fields of medicine; in ancient Egypt, doctors were highly specialized. There were two basic types of healers: physicians and priests. Egyptian medicine was based on the precept that there were 36 demons that could infect any of the 36 parts of the body. Priests utilized certain types of herbs and various rites in an attempt to appease the demons.

Physicians, though also influenced by the pervasive metaphysical theory of illness, had a highly intellectual and precise perception of medical problems and their solutions. A doctor would devote his life to studying one area, e.g., teeth, eyes, or rectum. Every malady, from open wounds to breast tumors, had specific prescriptions and courses of treatment. This structure fit in comfortably with the widely accepted theory that the human body was divided into 36 distinct sections, and is also reminiscent of modern medicinal specialization.

Imhotep serves as an excellent representation of the duality present in ancient medicine: his own medical accomplishments show the scientific aspect and his subsequent apotheosis highlights the more metaphysical component of how ancient medical practices were perceived. This dual-



ity is has not disappeared from our own society; when struck by illness, many choose to turn to both medicinal treatments and spiritual guidance. Imhotep, considered by many to be the Father of Ancient Medicine, straddled two theories of healing which we continue to balance today.

Animal Advice: Hibernation Habits

By Mia Dawson

I just got back from Fall Break and I can't believe my vacation is over. I just spent a whole week lying on the couch in my pajamas and now I am supposed to act like a sociable, productive human being. What a harsh welcome back! I am not ready to be socializing with this many people and am certainly not ready to be busy every second. Plus, the weather is gross here, adding incentive to laze around and resist facing the world. Please help!

Sincerely, Faltering in the 440 Dear Faltering -

After exceeding your energy reserves during midterm week, it's no surprise that you needed a period of hibernation. You're in good company — from hedgehogs to black bears, many mammals will take time to kick back, reduce their metabolic rate, and suspend animation for a while. But proceed with caution — the crucial period during which you arouse yourself is a delicate one. Take the Vancouver Island marmot, *Marmota vancouverensis*, for example. After hibernating for 210 days out of the year at a near freezing temperature, the marmot uses its very last stores of energy to heat its heart and restart circulation. Many of them, however, never awake. Those that do, although starving, must then wait at least a week before eating as they rebuild their digestive facilities. So, my advice to you is this - take a slow and easy transition back into action. Have a lunch date, perhaps, and do a couple lines of reading. Don't jump right back into splitchers and all-nighters — the result could be social and mental paralysis.