

1 number of chairs and stools found in the tomb should not be ignored if
 2 Tutankhamun's disabilities are considered. Some of the chairs could have been
 3 used as either litters or palanquins, whose use was well established by this time
 4 period.⁴ Tutankhamun's golden throne, nearly as recognizable as his funerary
 5 mask, shows signs of ancient repairs to the arms, something that might have been
 6 necessary had he been repeatedly gripping the arms to support himself as he
 7 stood.⁵ Additionally, several of his chairs and thrones, including the golden throne,
 8 originally were found with linen straps attached to their backs.⁶ No one is quite
 9 sure about their intended purpose.⁷ Current theories surrounding their use include
 10 them acting as a placeholder indicating that others not sit on the throne when the
 11 king was not present, or that they were used instead as a type of apparatus for
 12 transporting the empty throne.⁸ However, artistic depictions of Egyptians carrying
 13 thrones for transport, present in numerous tomb paintings, do not show the use of
 14 any straps. Instead the art depicts workers holding completely different sections of
 15 the thrones than where the straps were located.⁹ Additionally, it seems unlikely
 16 that a placeholder would have been necessary given the king's status. It seems
 17 plausible, given what we now know about Tutankhamun's disabilities that the
 18 straps may have acted as a means to secure him to his chairs and thrones, almost
 19 like a type of seatbelt or harness, especially if he had been carried around in them.
 20 Unfortunately, since these mysterious straps have only survived in photos, they
 21 cannot be examined for use and we may never know.

22 In total there were twelve stools, at least seven chairs, and eight additional
 23 footrests that were not associated with any chairs or stools.¹⁰ We know
 24 Tutankhamun's tomb is the best-preserved tomb discovered so far, and it is
 25 possible this number was not unusual. However, it is something that potentially
 26 opens further lines of inquiry. Similarly, all 145 pairs of Tutankhamun's
 27 underclothes were counted and cataloged.¹¹ That number is exceptionally high,

⁴Norman De Garis Davies. *The Rock Tombs of el-Amarna, Parts III and IV*. (London: Egypt Exploration Society, 1903), 1-25; Cyril Aldred. *Akhenaten: King of Egypt*. (London: Thames and Hudson, 1988), 279.

⁵Marianne Eaton-Krauss. *The Unknown Tutankhamun*. (New York: Bloomsbury, 2016), 23-25.

⁶Marianne Eaton-Krauss. *The Thrones, Chairs, Stools, and Footstools from the Tomb of Tutankhamun*, (Oxford: Griffith Institute, 2008), 26, 57.

⁷Marianne Eaton-Krauss. *The Thrones, Chairs, Stools, and Footstools from the Tomb of Tutankhamun*, (Oxford: Griffith Institute, 2008), 26, 57.

⁸Christian Loeben. "La Fonction Funeraire des Meubles Egyptiens," *Egypte, Afrique & Orient* 3 (1996): 25; Marianne Eaton-Krauss, *The Thrones, Chairs, Stools, and Footstools from the Tomb of Tutankhamun*, (Oxford: Griffith Institute, 2008), 26.

⁹Christian Loeben. "La Fonction Funeraire des Meubles Egyptiens," *Egypte, Afrique & Orient* 3 (1996): 25; Marianne Eaton-Krauss, *The Thrones, Chairs, Stools, and Footstools from the Tomb of Tutankhamun*, (Oxford: Griffith Institute, 2008), 26.

¹⁰Marianne Eaton-Krauss, *The Thrones, Chairs, Stools, and Footstools from the Tomb of Tutankhamun*, 7-8.

¹¹Gillian Vogelsang-Eastwood. *Tutankhamun's Wardrobe: Garments from the Tomb of Tutankhamun*. (Rotterdam: Barjestch van Waalwijk van Doorn and Co's, 1999), 19, 48-50; Brenda Fowler. "Forgotten Riches of King Tut: His Wardrobe," *The New York Times*, July 25, 1995.

1 however, as clothes were usually worn in sets and he only had 10 robes. This
 2 underwear could be suggestive of the king suffering from incontinence of some
 3 kind, and that would possibly point to the ancient Egyptians accounting for and
 4 providing for such a condition in the afterlife.

5 Another possible piece of evidence of his disability is that Tutankhamun was
 6 buried with over a hundred and thirty walking sticks, some of which appeared to
 7 have been used during his lifetime. One walking stick is even referenced, in a
 8 hieroglyph inscription, as having been his favorite.¹² There have been other
 9 examples of disabled individuals being buried with tools they needed for mobility.
 10 In the early 1900s, the University of Pennsylvania Museum of Archaeology and
 11 Anthropology acquired an example of an older man from the 5th dynasty,
 12 originally found in Deshasheh, buried with a cane. He is now believed to have had
 13 polio, which resulted in one leg being shorter than the other.¹³ Polio seems to have
 14 been a fairly common disease in ancient Egypt, as seen in other individuals such as
 15 Roma the Doorkeeper from the New Kingdom, although some Egyptologists
 16 speculate that cerebral palsy could have been common as well.¹⁴ Disabled ancient
 17 Egyptians were probably not uncommon, as we have numerous artistic depictions
 18 of them in Egyptian art.¹⁵

19 Howard Carter cataloged all one hundred and thirty of these walking sticks.
 20 Carter himself mentioned, “The young Tutankhamun must have been an amateur
 21 collector of walking sticks and staves, for here, as in the Antechamber, and the
 22 burial chamber, we found a great number. They were of no doubt, in part of ritual
 23 significance, but many of them have evidently seen daily use.”¹⁶ The evidence of
 24 daily use was not considered of primary importance. Some modern Egyptologists
 25 have hypothesized that walking sticks were seen as status symbols.¹⁷ However
 26 despite being the only pharaoh to have an intact tomb, it seems strange that no
 27 other pharaoh has been discovered with the large number of sticks that
 28 Tutankhamun had. Plus, as mentioned earlier and seen below, there have been
 29 commoners discovered with sticks that were clearly used as mobility aids.¹⁸ Yet it
 30 is interesting to note that William Flinders Petrie, teacher of Howard Carter, had

¹²Nicholas Reeves. *The Complete Tutankhamun*. (London: Thames and Hudson, 1990), 178.

¹³UPenn Museum, “Mummy Skeleton Man,” last modified 2017, <https://www.penn.museum/collections/object/171752>

¹⁴Joyce Filer. *Disease*. (Austin: University of Texas Press, 1995), 74; Aidan Dodson, ARCE Conference Feedback to Alexandra Morris, American Research Center in Egypt Conference, Kansas City, Missouri, April 21, 2017.

¹⁵Alexandra F. Morris “Let the Artifacts Speak,” 4-60; Heba Mahran and Samar Mostafa Kamal, “Physical Disability in Old Kingdom Tomb Scenes,” *Athens Journal of History* 2.3 (2016): 169-191.

¹⁶Howard Carter. *The Tomb of Tut.ankh.amen Volume 3: The Annexe and Treasury*. (London: Cassell & Company Ltd., 1923), 94.

¹⁷Toby A. H. Wilkinson. *Early Dynastic Egypt*. (New York: Routledge, 1999), 158; Gay Robins. *The Art of Ancient Egypt*. (Cambridge: Harvard University Press, 2008), 52; Thomas H. Maugh II. “CT Scan convince Egyptian researchers that King Tutankhamun wasn’t murdered,” *Los Angeles Times*. March 9, 2005.

¹⁸W. M. Flinders Petrie. *Deshasheh, 1897*. (London: Egypt Exploration Fund, 1898), 18.

1 discovered and published the Deshasheh mummy in 1898, over 20 years before
 2 Tutankhamun's discovery, and mentioned that the mummy's, "left thigh...was
 3 completely united in one mass, but two inches too short. A stick had therefore
 4 been carried to walk with, and this lay by the body."¹⁹ Carter had also documented
 5 another disabled person (the Queen of Punt) when he copied reliefs from
 6 Hatchepsut's mortuary temple several years prior.²⁰ The anatomist, Douglas Derry,
 7 most likely would have recognized the malady during his initial examination of the
 8 King. A remedy for clubbed foot had been known and in use in Europe for over 70
 9 years at the time of Tutankhamun's discovery.²¹

10 Another piece of evidence published by Egyptologist Andre Velmeijer in
 11 2011, while completing a study on the footwear of ancient Egyptians, found that
 12 Tutankhamun's sandals had an extra horizontal strap located just above the toes
 13 that appeared on no other ancient Egyptian shoes.²² There were over eighty pairs
 14 of footwear found in Tutankhamun's tomb in addition to the hundred and thirty
 15 walking sticks. Velmeijer's theory is that these extra straps functioned as a kind of
 16 orthopedic shoe, which helped stabilize the foot and may have helped
 17 Tutankhamun to walk.²³ He also notes that most of Tutankhamun's sandals have a
 18 distinct wear pattern on the left foot, which is believed to be the clubbed foot.²⁴ It
 19 is also interesting to note that footwear worn by Egyptian pharaohs typically
 20 featured iconography that allowed Egypt's enemies to be trampled underfoot.²⁵ In
 21 Tutankhamun's case however, these enemies appeared on his canes and walking
 22 sticks instead allowing them to be crushed by hand instead of trodden underfoot.

23 Also found in the tomb were a rather large number of plants and herbs. While
 24 burial with food and other herbs was typical for an ancient Egyptian, the sheer
 25 number of these items in Tutankhamun's tomb is unusual. There are also
 26 botanical items found in Tutankhamun's tomb and his embalmer's tomb that have
 27 never been found anywhere else, out of all the currently excavated tombs of
 28 Egypt.²⁶ (See appendix for a more detailed look of the botanical remains.)
 29 However, by acknowledging Tutankhamun's disability, the presence of all these
 30 plants might begin to make sense. Out of at least 84 plants found within the tomb,
 31 75 are known to have had medicinal uses in ancient Egypt.²⁷ Out of these botanical
 32 remains, the majority are known to have been used as analgesics, as antiseptics

¹⁹ W. M. Flinders Petrie. *Deshasheh, 1897*, 18.

²⁰ Paul Collins. *Discovering Tutankhamun*. (Oxford: Ashmolean Museum, 2014), 20-21.

²¹ Matthew B. Dobbs, *et al.* "Treatment of Idiopathic Clubfoot: A Historical Review," *The Iowa Orthopedic Journal* 20 (2000): 59-64.

²² Andre J. Velmeijer, *Tutankhamun's Footwear: Studies of Ancient Egyptian Footwear* (Leiden: Sidestone Press, 2011), 130-138.

²³ Velmeijer, *Tutankhamun's Footwear*, 138-143.

²⁴ Velmeijer, *Tutankhamun's Footwear*, 208-221.

²⁵ Toby A. H. Wilkinson. *Early Dynastic Egypt*. (New York: Routledge, 1999), 162.

²⁶ Alexandra F. Morris "Let the Artifacts Speak," 60-77

²⁷ *Ibid.*, 60-77.

1 and as antipyretics.²⁸ These plants would have been a necessity for Tutankhamun
 2 in the afterlife considering the pain that a clubbed foot would have caused him. He
 3 was also suffering from a broken leg, now thought to have possibly contributed to
 4 his death, which would have caused even more excruciating pain. In addition to
 5 this, Tutankhamun is now thought to possibly have had malaria and Köhler
 6 disease, a bone disorder resulting in possible necrosis of the foot. All of these are
 7 known to cause discomfort and pain.²⁹ The broken leg in addition to his other
 8 disabilities most likely made all these drugs/medicinal plants medical necessities.

9 The placement of these items within the tomb is also significant as they are
 10 primarily clustered in three locations: by the life size guardian statues near the
 11 tomb entrance; by the stack of beds, chairs and stools; and in, next to, or on
 12 Tutankhamun's sarcophagi or actual mummy.³⁰ This suggests that items in
 13 Tutankhamun's tomb were strategically placed to better accommodate him and
 14 manage his medical/physical needs. If as hypothesized, Tutankhamun had mobility
 15 issues, the placement of items cannot be ignored; placement is no longer random,
 16 but deliberate. In other words, everything he needed in the afterlife, was readily
 17 accessible to him with little movement required on his part. Careful thought seems
 18 to have been given to Tutankhamun's mobility and comfort in the afterlife. This
 19 also suggests that despite all his physical complications, the Egyptians had both
 20 the knowledge and motivation to keep him, as well as other disabled individuals,
 21 alive and comfortable. How do we know? There are numerous artistic depictions
 22 of other adult disabled individuals such as Roma the Doorkeeper, dwarves, and
 23 pyramid workers, as well as the mummified remains of these individuals, that
 24 come from a variety of social classes and time periods in ancient Egyptian
 25 history.³¹ This makes it possible to surmise that such compassion and careful
 26 planning was not limited to the royal family during the New Kingdom.³²

27 The lotus flower, itself invites another line of inquiry. Lotuses had appeared
 28 before in Egyptian tombs, usually as hair ornamentations, or in garden scenes as
 29 seen in the tomb of Nebamun, also from the 18th dynasty.³³ The lotus was also the
 30 symbol of upper Egypt.³⁴ They were a popular motif in the later Ramesside Period
 31 (19th dynasty-20th dynasty), but were never found in the large quantities seen in

²⁸Alexandra F. Morris "Let the Artifacts Speak," 60-77; Zahi Hawass *et al.* "Ancestry and Pathology in King Tutankhamun's Family." *Journal of the American Medical Association* 303 (2010): 644-646.

²⁹Zahi Hawass *et al.* "Ancestry and Pathology in King Tutankhamun's Family," 644-646; Rossella Lorenzi. "King Tut Re-Creation Presents a Shocking Image," *Discovery News* (2014).

³⁰Nicholas Reeves. *The Complete Tutankhamun*. (London: Thames and Hudson, 1990), 211.

³¹Alexandra F. Morris "Let the Artifacts Speak," 4-60; Heba Mahran and Samar Mostafa Kamal, "Physical Disability in Old Kingdom Tomb Scenes," *Athens Journal of History* 2.3 (2016): 169-191.

³²Alexandra F. Morris "Let the Artifacts Speak," 4-60.

³³Jaromir Malek. *Egypt: 4000 Years of Art*. (New York: Phaidon Press, 2003), 229.

³⁴David P. Silverman. *Masterpieces of Tutankhamun* (New York: Abbeville Press, 1978), 61,79.

1 Tutankhamun's tomb.³⁵ When compared to the tomb of his immediate successors
 2 and advisors, the lotus motifs are conspicuously absent from Aye's, Horemheb's,
 3 and Maya's tombs, despite the same artistic style.³⁶ In Tutankhamun's tomb the
 4 lotus can be found almost everywhere.³⁷ In addition to actual botanical materials,
 5 the lotus was depicted numerous times artistically. It is on jewelry, furniture, in
 6 wall paintings, on other images of the king found within the tomb, and even on his
 7 shoes and clothing.³⁸ There were so many lotuses found in the tomb both
 8 artistically and in actual botanical remains that according to Dr. Stephen Phillips,
 9 as well as F. Nigel Hepper, Tutankhamun's tomb had the most lotus flowers found
 10 in it of any tomb in all of ancient Egyptian history.³⁹ The key point to keep in
 11 mind, is that research done by Rosso and Benson Harer, Jr. reveals the lotus flower
 12 was used medicinally in ancient Egypt as a *pain reliever* and sleep aid. It seems
 13 reasonable to conclude that the ancient Egyptians deliberately placed all these
 14 lotuses and lotus imagery within Tutankhamun's tomb to ensure that he was
 15 comfortable and well provided for in the afterlife.⁴⁰

16 One of the current theories about Tutankhamun's death is that he fell out of or
 17 was hit in the chest by a moving chariot, breaking his leg.⁴¹ Coupled with a
 18 weakened immune system (possibly from malaria) the injury killed him.⁴² It
 19 should be noted that some of the artwork depicting Tutankhamun in a chariot
 20 portrays him as able-bodied, but this might be a continuation of traditional artistic
 21 motifs depicting the pharaoh that were typically used for propaganda purposes.⁴³
 22 Injuries found on Tutankhamun's mummy may, in fact, be the result of repeatedly
 23 falling down or into things in his efforts to be independently mobile. Given
 24 Tutankhamun's disabilities it is highly unlikely that he could have ridden in a

³⁵Aidan Dodson. *Amarna Sunset: Nefertiti, Tutankhamun, Ay, Horemheb and the Egyptian Counter-Reformation* (New York: American University in Cairo Press, 2009), 66-67.

³⁶Aidan Dodson. *Amarna Sunset*, 66-67; Geoffrey T. Martin. *The Tomb of Maya and Meryt: The Reliefs, Inscriptions, and Commentary*. (London: Egypt Exploration Society, 2012), 64-69, Plates 25, 29, 35, 52, 53.

³⁷Aidan Dodson. *Amarna Sunset*, 66-67; Geoffrey T. Martin. *The Tomb of Maya and Meryt*, 64-69, Plates 25, 29, 35, 52, 53.

³⁸Alexandra F. Morris, "Let the Artifacts Speak," 4-32.

³⁹Stephen Phillips. "Pharaoh's Flowers: Botanical Treasures from the Fabled Tomb of Tutankhamun," Public Lecture, Event from the Pennsylvania Museum of Archaeology and Anthropology, Philadelphia, May 19, 2013; F. Nigel Hepper. *Pharaoh's Flowers: The Botanical Treasures of Tutankhamun*. (London: HMSO, 1990), 10-12, 16.

⁴⁰Ana Maria Rosso. "Poppy and Opium in Ancient Times: Remedy or Narcotic?" *Biomedicine International* 1 (2010): 83-84; W. Benson Harer Jr. "Pharmacological and Biological Properties of the Egyptian Lotus." *Journal of the American Research Center in Egypt* 22 (1985): 49-54

⁴¹Mary Beth Griggs, "New Theory: King Tut Died in a Chariot Crash," *Smithsonian*, November 4, 2013, <http://www.smithsonianmag.com/smart-news/new-theory-king-tut-died-in-a-chariot-crash-180947562/>

⁴²Mary Beth Griggs, "New Theory: King Tut Died in a Chariot Crash," *Smithsonian*, November 4, 2013, <http://www.smithsonianmag.com/smart-news/new-theory-king-tut-died-in-a-chariot-crash-180947562/>

⁴³Jaromir Malek. *Egypt: 4000 Years of Art*. (New York: Phaidon Press, 2003), 204; David P. Silverman. *Masterpieces of Tutankhamun* (New York: Abbeville Press, 1978), 50.

1 chariot. A far more likely explanation is that Tutankhamun simply fell and broke
 2 his leg, perhaps while on procession to various temples or at his rest house,
 3 sometimes referred to as a hunting lodge.⁴⁴ Tutankhamun could easily have
 4 suffered the broken leg falling in the bath, falling out of bed, or falling from one of
 5 his chairs, thrones, or palanquins when he attempted to get up. If he fell from his
 6 palanquin, especially if it was currently in use, this would have meant a fall of at
 7 least two feet up to about four feet, since artistic depictions show the Egyptians
 8 carrying them at least at waist height.⁴⁵ When one takes into account an earlier
 9 theory by Dr. Ashrafian, who states that Tutankhamun might have had temporal
 10 lobe epilepsy, the reason for these injuries and an explanation for the fall that
 11 ultimately resulted in his death becomes less certain than had previously been
 12 assumed.⁴⁶ It should be noted that malaria can also cause seizures as well as brain
 13 damage in children.⁴⁷ Tutankhamun could have had a seizure that resulted in a fall,
 14 perhaps while he was being carried in one of his canopied chairs, and acquired the
 15 broken leg that way. We simply do not know. To settle upon one explanation at
 16 the exclusion of others seems serendipitous. It is not only one possible answer, to
 17 the exclusion of others, but possibly a fatal confluence of events.

18 Another bit of evidence that hints at Tutankhamun's disability is the art
 19 depicted within his tomb on both the walls and other artifacts. In all the artistic
 20 depictions within Tutankhamun's tomb, he is shown either holding canes or
 21 walking sticks, sitting down, or literally being supported or held up by either the
 22 gods or his wife.⁴⁸ Furthermore, all depictions seem to take great care in hiding or
 23 concealing his left foot, which we now know from scans to be his problem foot.⁴⁹
 24 This suggests that ancient Egyptian artisans were not only aware of his disability,
 25 but had acquired great skill, tact and protocols for rendering it so that the disability
 26 is acknowledged, but not to the point of distraction, detraction, or derision. Within
 27 the tomb there are also several depictions of lions—a well-established symbol of
 28 the pharaoh long before this point in Egyptian history.⁵⁰ In order to help them
 29 stand upright, Tutankhamun's lions are leaning on supports, which also double as
 30 the Egyptian symbol for protection. When the depictions of Tutankhamun are
 31 compared to that of Pharaoh Akhenaten, his immediate predecessor, or that of
 32 either of Tutankhamun's successors, his general Horemheb, or advisor Aye, only

⁴⁴Zahi Hawass. *The Golden King: The World of Tutankhamun*. (Washington DC: National Geographic, 2006), 55.

⁴⁵Norman De Garis Davies. *The Rock Tombs of el-Amarna, Parts III and IV*, 1-25; Cyril Aldred. *Akhenaten: King of Egypt*, 279.

⁴⁶H. Ashrafian, "Familial epilepsy in the pharaohs of ancient Egypt's eighteenth dynasty," *Epilepsy & Behavior* 25, (2012): 29

⁴⁷Richard Idro *et al.* "Cerebral Malaria: Mechanisms of Brain Injury and Strategies for Improved Neuro-Cognitive Outcome," *Pediatric Research* 68.4 (2010): 267-274.

⁴⁸Alexandra F. Morris, "Let the Artifacts Speak," 4-32.

⁴⁹Zahi Hawass *et al.* "Ancestry and Pathology in King Tutankhamun's Family," 644-646; Nicholas Reeves. *The Complete Tutankhamun*, 180; Katherine Stoddert Gilbert, *et. al. Treasures of Tutankhamun*. (New York: Bantam, 1976), 170-171.

⁵⁰Nicholas Reeves. *The Complete Tutankhamun*, 180; Katherine Stoddert Gilbert, *et. al. Treasures of Tutankhamun.*, 170-171.

1 Tutankhamun is depicted as physically supported by those around him or utilizing
 2 a stick of some type.⁵¹ This is important because according to current knowledge
 3 neither Akhenaten nor Horemheb, nor Aye, had any conditions that would have
 4 disabled them physically and limited their mobility.⁵² Tutankhamun is also shown
 5 being held up by others on monuments outside of his tomb as well.⁵³ It further
 6 strengthens the idea that Egyptian society was accustomed to disabled people, as
 7 the artists appear to have already had an established protocol for depicting and
 8 tacitly acknowledging a disability without stigmatizing it. In the depiction of
 9 Seneb the dwarf from the Old Kingdom, his disability is depicted tactfully and in a
 10 humanizing way.⁵⁴ In addition, we know that Seneb had custom designed
 11 furniture, including low stools, and a litter with a lower back designed to meet his
 12 adaptive needs.⁵⁵ This same tact and humanization can be extended to a female
 13 helmsman with dwarfism found on a model boat in Tutankhamun's tomb.⁵⁶ These,
 14 as well as numerous other artistic depictions of disabled Egyptians mentioned
 15 earlier, may show that ancient Egyptian society was accepting of those with other
 16 physical disabilities.⁵⁷

17 Tutankhamun's tomb layout is suggestive of perhaps a hurried burial, but
 18 overall it shows careful forethought in planning for all of the king's needs in the
 19 afterlife. In the antechamber / first chamber of the tomb were most of
 20 Tutankhamun's stools, couches, and beds. In the doorway to the burial chamber,
 21 which is the next chamber over, were two life-sized statues both holding sticks.
 22 They were the same height as Tutankhamun and have been identified as "guardian
 23 figures." Most of the walking sticks were also located in this chamber.⁵⁸ Since we
 24 already know that Tutankhamun had a clubbed foot and most likely required
 25 mobility assistance, perhaps these figures were also there to assist the king in his
 26 efforts to be mobile. Perhaps the king tried to be independently mobile, further
 27 evidenced when one goes past the burial chamber to the treasury, where there were
 28 more walking sticks.⁵⁹ Another point to consider is that Tutankhamun's walking
 29 sticks were scattered throughout the tomb. Other items in large numbers, such as
 30 shoes and underwear, were found in collections in a single location.

31 The overall layout suggests that despite a seemingly haphazard appearance,
 32 the tomb was laid out so that the king would have assistance getting around no
 33 matter where he was within the tomb in his afterlife, and would have access to
 34 things that met all his needs as a disabled man. Considering the evidence, this

⁵¹Alexandra F. Morris, "Let the Artifacts Speak," 4-32.

⁵²Cyril Aldred. *Akhenaten: King of Egypt*, 51, 77, 236, 260; Zahi Hawass *et al.* "Ancestry and Pathology in King Tutankhamun's Family," 644-646.

⁵³Marianne Eaton-Krauss. *The Unknown Tutankhamun*. (New York: Bloomsbury, 2016), 56-58.

⁵⁴Veronique Dasen. *Dwarfs in Ancient Egypt and Greece*. (Oxford: Oxford University Press, 1993), 130.

⁵⁵Veronique Dasen, *Dwarfs in Ancient Egypt and Greece*, 130.

⁵⁶Joyce Filer, *Disease*, 55-57.

⁵⁷Alexandra F. Morris, "Let the Artifacts Speak," 4-60.

⁵⁸Nicholas Reeves. *The Complete Tutankhamun*, 178-179.

⁵⁹Nicholas Reeves, *The Complete Tutankhamun*, 178-179.

1 explanation is at least plausible as traditional assumptions. For while the
2 preparations may have been hurried, the Egyptians in fact did believe they were
3 burying a god and his children. They were cognizant of the need for extra care.

4 The presence of the mummies of Tutankhamun's stillborn daughters, one of
5 whom is believed to have had spina bifida, could also be seen as evidence of
6 ancient Egypt's disability acceptance and of Tutankhamun's disabilities as well.⁶⁰
7 Spina bifida has been shown to be related to clubbed foot and can be passed down
8 genetically, which suggests the stillborn girl showing evidence of the condition
9 inherited it from her parents, and provides yet another piece of evidence for
10 Tutankhamun's own disabilities.⁶¹

11 Stillborn babies and very young children were seldom mummified in ancient
12 Egypt until the Ptolemaic Period.⁶² Yet these two babies were mummified, and
13 were given their own sarcophagi, revealing a unique level of acceptance and
14 compassion. It also proves that at the very least, these fetuses were recognized as
15 human beings by their parents, by the priests who performed the mummification,
16 and the artisans who crafted the tiny sarcophagi. One girl even had a small mask
17 made for her; the other may have as well, but it was discovered in the embalmer's
18 cache, which is somewhat strange.⁶³ The inclusion of the girls in the tomb along
19 with their disabled father, along with the dwarf figure, walking sticks and other
20 accouterments, is evidence that, at the very least among the royal family, disability
21 was accepted in ancient Egypt during this period. However, the numerous other
22 depictions of disabled individuals throughout Egyptian history suggest that this
23 acceptance may have extended to other levels of society and into other periods.

24 In conclusion, as Dr. Malek explained, Tutankhamun's discovery "doesn't
25 belong to Egyptologists only. It doesn't even belong to Egypt only. The discovery
26 belongs to everybody," including the disabled.⁶⁴ It is interesting to note that even
27 in current-day exhibitions and publications on Tutankhamun, his disabilities are
28 still mostly ignored, and there is still debate as to whether he was disabled at all.⁶⁵
29 Does making him able-bodied say more about our society today, than it does about
30 the man himself? As Dr. Haj wrote in his book *Disability in Antiquity*, "Over the
31 centuries millions of handicapped people have lived and died. They have been a
32 substantial but voiceless minority."⁶⁶ We need to look at the ethos of the tomb in

⁶⁰Carol Reeves. *Egyptian Medicine*. (Buckinghamshire: Shire Publications, 2001), 48.

⁶¹Mayo Foundation for Medical Education and Research, "Diseases and Conditions: Clubfoot," Mayo Clinic, last modified 2014, <http://www.mayoclinic.org/diseases-conditions/clubfoot/basics/definition/conV20027211>

⁶²Carol Reeves. *Egyptian Medicine*. (Buckinghamshire: Shire Publications, 2001), 20.

⁶³Herbert Eustis Winlock. *Tutankhamun's Funeral*. (New York: Metropolitan Museum of Art, 2010), 39-43; Joyce Tyldesley. *Tutankhamen: The Search for an Egyptian King*. (New York: Basic Books, 2012), 52-53.

⁶⁴Jo Marchant. *The Shadow King: The Bizarre Afterlife of King Tut's Mummy*. (New York: Da Capo Press, 2013), 80.

⁶⁵Traveling Museum Exhibition, *The Discovery of King Tut*, Premier Exhibitions 5th Avenue, New York, New York; Zahi Hawass. *Discovering Tutankhamun: From Howard Carter to DNA*, 158-160.

⁶⁶Fareed Haj, *Disability in Antiquity*. (New York: Philosophical Library, 1970), 11.

1 totality rather than as individual parts. By doing so, we can see a clearer picture of
 2 Tutankhamun as a disabled man and provide another way for all people see
 3 themselves validated in history. This will surely give Tutankhamun the respect he
 4 deserves both as a pharaoh and a disabled human being.

7 Appendix:

9 The chart below is a list of the fully identifiable plants and other botanical items
 10 found in Tutankhamun's tomb. Listed are their common names, scientific names,
 11 medicinal uses, and finally the sources in which each plant and medicinal use was
 12 verified can be found in corresponding footnotes, although Christian De
 13 Vartavan's *Hidden Fields of Tutankhamun: From Identification to Interpretation*
 14 *of Newly Discovered Plant Material From the Pharaoh's Grave* was the main
 15 source used. Plants marked with a * have only ever been found in Tutankhamun's
 16 tomb. Out of 84 identified botanical items, only 9 were unable to be identified as
 17 having some medicinal value, and 8 botanical items have never been found
 18 elsewhere in Egypt:

20 Botanicals Found in Tutankhamun's Tomb:

Plant	Scientific Name	Medicinal Uses
Acacia (Nile acacia) ⁶⁷	<i>Acacia leguminosae, tortilis, raddiana, nilotica, albida</i>	laxative, demulcent
Alisma* ⁶⁸	<i>Alismaceae plantago</i>	diuretic, astringent
Almond Oil, Stones ⁶⁹	<i>Prunus dulcis</i>	laxative, diuretic.
Balanos Oil, Egyptian plum/ Heglig ⁷⁰	<i>Balanites aegyptiaca</i>	unguent
Barley florets and debris ⁷¹	<i>Hordeum sativum</i>	to treat intestinal problems, carminative
Balm of Gilead ⁷²	<i>Commiphora</i>	unguent

⁶⁷ James P. Allen, *The Art of Medicine in Ancient Egypt*. (New York: The Metropolitan Museum of Art, 2005), 102-103, 115; John Nunn. *Ancient Egyptian Medicine*. (Norman: University of Oklahoma Press, 1996), 30- 32, 72, 91, 152, 215.

⁶⁸ Christian De Vartavan. *Hidden Fields of Tutankhamun: From Identification to Interpretation of Newly Discovered Plant Material From the Pharaoh's Grave*. (London: Triade Exploration, 2002), 58; Walter H. Lewis and Memory P.F. Elvin-Lewis. *Medical Botany: Plants Affecting Man's Health*. (New York: J. Wiley and Sons, 1977), 312.

⁶⁹ Lise Manniche. *An Ancient Egyptian Herbal*. (London: British Museum Press, 2006), 138-139; Irene Jacob and Walter Jacob. *The Healing Past: Pharmaceuticals in the Biblical and Rabbanic World*. (Leiden: Brill, 1993), 42.

⁷⁰ Lise Manniche. *An Ancient Egyptian Herbal*, 81; John Nunn, *Ancient Egyptian Medicine*, 140, 152, 160.

⁷¹ John Nunn, *Ancient Egyptian Medicine*, 152; Irene Jacob, *The Healing Past*, 42-43.

⁷² Irene Jacob, *The Healing Past*, 23.

	<i>gileadensis</i>	
Bedstraw ⁷³	<i>Galium tricornae</i>	diuretic, astringent
Ben Oil ⁷⁴	<i>Moringa peregrina</i>	anti-inflammatory, antiseptic.
Black Cumin ⁷⁵	<i>Nigella sativa</i>	poultice, laxative, disinfectant, anti-inflammatory.
Blue Waterlily ⁷⁶	<i>Nymphaea cerulea</i>	astringent, antiseptic, aphrodisiac
Castor Oil ⁷⁷	<i>Ricinus communis</i>	purgative, demulcent
Wild Celery Leaves ⁷⁸	<i>Apium graveoleus</i>	diuretic, antirheumatic, carminative, spasmolytic
Chick-Peas ⁷⁹	<i>Cicer arietinum</i>	laxative
Christthorn ⁸⁰	<i>Ziziphus spina-christi</i>	laxative, febrifuge, purgative, medical dressing for open wounds.
Cilician Fir ⁸¹	<i>Abies cilicica</i>	antiseptic, diuretic, carminative
Cinquefoil ^{*82}	<i>Potentilla supina</i>	anti-inflammatory
Cocculus ⁸³	<i>Cocculus hirsutus</i>	diuretic
Common Reed ⁸⁴	<i>Phragmites australis</i>	antiseptic, poultice, anthelmintic.
Common Vetch ⁸⁵	<i>Vicia sativa</i>	

⁷³ Margaret Grieve. *A Modern Herbal*. (New York: Dover, 1971), 462.

⁷⁴ John Nunn. *Ancient Egyptian Medicine*. (Norman: University of Oklahoma Press, 1996), 14,152.

⁷⁵ Lise Manniche, *An Ancient Egyptian Herbal*, 81; John Nunn, *Ancient Egyptian Medicine*, 152; Irene Jacob, *The Healing Past*, 40; Walter Wreszinski. *Medizin der Alten Ägypter: Band III: "Der Papyrus Ebers."* (Leipzig, 1913), 28,55, 125.

⁷⁶ John Nunn, *Ancient Egyptian Medicine*, 215.

⁷⁷ John Nunn, *Ancient Egyptian Medicine*, 33, 90, 140, 144, 152; Lise Manniche, *An Ancient Egyptian Herbal*, 142-143.

⁷⁸ John Nunn, *Ancient Egyptian Medicine*, 154, 215.

⁷⁹ John Nunn, *Ancient Egyptian Medicine*, 14.

⁸⁰ John Nunn, *Ancient Egyptian Medicine*, 152, 216; Irene Jacob, *The Healing Past*, 34; F. Nigel Hepper. *Pharaoh's Flowers: The Botanical Treasures of Tutankhamun*. (London: HMSO, 1990), 68.

⁸¹ F. Nigel Hepper, *Pharaoh's Flowers*, 45.

⁸² James P. Allen, *The Art of Medicine in Ancient Egypt*, 109, 115; Irene Jacob, *The Healing Past*, 117; Christian De Vartavan, *Hidden Fields of Tutankhamun*, 58.

⁸³ F. Nigel Hepper, *Pharaoh's Flowers*, 56.

⁸⁴ Irene Jacob, *The Healing Past*, 43; John Nunn, *Ancient Egyptian Medicine*, 63, 105.

⁸⁵ Christian De Vartavan, *Hidden Fields of Tutankhamun*, 43.

Coriander ⁸⁶	<i>Coriandrum sativum</i>	carminative, aromatic, narcotic
Blue Cornflower ⁸⁷	<i>Centuarea depressa</i>	antipyretic, unguent, anti-venom for scorpion stings
Date Palm Leaves and Wine ⁸⁸	<i>Phoenix dactylifera</i>	astringent, antipyretic, antitussive, poultice
Darnel ⁸⁹	<i>Lolium temulentum</i>	sedative, anodyne
Dock ⁹⁰	<i>Rumex crispus</i>	astringent, laxative
Dodder ⁹¹	<i>Cuscuta pedicellata</i> , <i>Cuscuta approximata</i>	analgesic, anthelmintic, anti-inflammatory
Echinaria * ⁹²	<i>Echinara capitata</i>	antiseptic
Einkorn ⁹³	<i>Triticum monococcum</i>	
Emmer wheat ⁹⁴	<i>Triticum dococum</i>	anti-inflammatory, anodyne
Flax ⁹⁵	<i>Linum usitatissimum</i>	purgative, anti-inflammatory, antibacterial, laxative, antitussive, anodyne, demulcent
Frankincense ⁹⁶	<i>Burseraceae boswellia</i>	anti-inflammatory, diuretic, laxative, purgative, disinfectant
Fenugreek ⁹⁷	<i>Trigonella foenum graecum</i>	carminative, tonic, laxative, expectorant, appetite stimulant
Forrsk * ⁹⁸	<i>Cornopus squamatus</i>	anti-diarrheal, demulcent, diuretic.
Garlic ⁹⁹	<i>Allium sativum</i>	poultice, laxative, disinfectant

⁸⁶ Walter Wreszinski, *Medizin der Alten Ägypter*, 102-124; John Nunn, *Ancient Egyptian Medicine*, 15, 152; Lise Manniche, *An Ancient Egyptian Herbal*, 94.

⁸⁷ Lise Manniche, *An Ancient Egyptian Herbal*, 85.

⁸⁸ John Nunn, *Ancient Egyptian Medicine*, 15, 94, 152, 215; Irene Jacob, *The Healing Past*, 41.

⁸⁹ Irene Jacob, *The Healing Past*, 42.

⁹⁰ Irene Jacob, *The Healing Past*, 72, 79.

⁹¹ Margaret Grieve, *A Modern Herbal*, 810.

⁹² Christian De Vartavan, *Hidden Fields of Tutankhamun*, 58.

⁹³ Christian De Vartavan, *Hidden Fields of Tutankhamun*, 46.

⁹⁴ Lise Manniche, *An Ancient Egyptian Herbal*, 152-153; Irene Jacob, *The Healing Past*, 42; John Nunn, *Ancient Egyptian Medicine*, 152.

⁹⁵ John Nunn, *Ancient Egyptian Medicine*, 154, 215.

⁹⁶ Francis LI Griffith. *The Petrie Papyri: Hieratic Papyri from Kahun and Gurob*. (London: Quaritch, 1898), 12; John Nunn, *Ancient Egyptian Medicine*, 94-95.

⁹⁷ John Nunn, *Ancient Egyptian Medicine*, 15, 154.

⁹⁸ Margaret Grieve, *A Modern Herbal*, 642-643; Christian De Vartavan, *Hidden Fields of Tutankhamun*, 58.

⁹⁹ Irene Jacob, *The Healing Past*, 10, 36, 78; John Nunn. *Ancient Egyptian Medicine*, 14.

Grape vine ¹⁰⁰	<i>Vitis vinifera</i>	diuretic, laxative, antitussive, anodyne
Grewia ¹⁰¹	<i>Grewia tenax</i>	anti-inflammatory, diuretic, demulcent
Halfa Grass ¹⁰²	<i>Desmotaachya bipinnata</i>	
Henna ¹⁰³	<i>Lawsonia inermis</i>	astringent, sedative.
Honey ¹⁰⁴		poultice, antiseptic, unguent.
Rock Jasmine* ¹⁰⁵	<i>Androsace maxima</i>	anti-inflammatory.
Common Juniper ¹⁰⁶	<i>Juniperus communis</i>	diuretic, laxative
Red Berried Juniper ¹⁰⁷	<i>Juniperus virginiana</i>	diuretic, laxative
Lentils ¹⁰⁸	<i>Lens culinaris</i>	laxative.
Linseed Oil ¹⁰⁹	<i>Linum usitatissimum</i>	purgative, anti-inflammatory, anti-bacterial, laxative, antitussive, anodyne, demulcent
Lotus Flowers ¹¹⁰	<i>Nymphaea lotus</i> , <i>Nymphaea caerulea</i>	aphrodisiac, antiseptic, astringent
Lupin ¹¹¹	<i>Lupinus</i>	anthelmintic, diuretic, unguent
Madder ¹¹²	<i>Rubia tinctorum</i>	diuretic
Madonna Lilies ¹¹³	<i>Lilium candidum</i>	demulcent, anti-inflammatory, unguent
Mallow* ¹¹⁴	<i>Malva neglecta</i> , <i>Malva</i>	diuretic, poultice

¹⁰⁰ Lise Manniche, *An Ancient Egyptian Herbal*, 155-156; Irene Jacob, *The Healing Past*, 45.

¹⁰¹ Walter H. Lewis, *Medical Botany*, 233.

¹⁰² F. Nigel Hepper, *Pharaoh's Flowers*, 33.

¹⁰³ F. Nigel Hepper, *Pharaoh's Flowers*, 21, 25.

¹⁰⁴ John Nunn, *Ancient Egyptian Medicine*, 28, 32, 35, 63, 72, 90-91, 94-95, 105-106, 140, 143.

¹⁰⁵ Margaret Grieve, *A Modern Herbal*, 447-449; Christian De Vartavan. *Hidden Fields of Tutankhamun*, 58.

¹⁰⁶ Lise Manniche, *An Ancient Egyptian Herbal*, 110-112; F. Nigel Hepper. *Pharaoh's Flowers*, 60; John Nunn, *Ancient Egyptian Medicine*, 72, 152.

¹⁰⁷ F. Nigel Hepper, *Pharaoh's Flowers*, 60; John Nunn, *Ancient Egyptian Medicine*, 72, 152.

¹⁰⁸ Lise Manniche, *An Ancient Egyptian Herbal*, 115.

¹⁰⁹ John Nunn, *Ancient Egyptian Medicine*, 140, 152.

¹¹⁰ Lise Manniche, *An Ancient Egyptian Herbal*, 126-129; John Nunn. *Ancient Egyptian Medicine*, 14, 152, 157, 215; W. Benson Harer Jr, "Pharmacological and Biological Properties of the Egyptian Lotus." *Journal of the American Research Center in Egypt* 22 (1985): 49-54; Ana Maria Rosso. "Poppy and Opium in Ancient Times: Remedy or Narcotic?" *Biomedicine International* 1 (2010): 81-87.

¹¹¹ Margaret Grieve, *A Modern Herbal*, 502-503.

¹¹² Lise Manniche, *An Ancient Egyptian Herbal*, 144.

¹¹³ Margaret Grieve, *A Modern Herbal*, 482.

	<i>rotundifolia, malva parvi flora</i>	
Mandrake Fruits ¹¹⁵	<i>Mandragora officinarum</i>	diuretic, purgative
Mayweed Leaves and Flowers ¹¹⁶	<i>Anthemis pseudocotula</i>	poultice, carminative
Moringa/ Horseradish Tree ¹¹⁷	<i>Moringa perengrina</i>	diuretic, antiseptic
Mustard Seed ¹¹⁸	<i>Brassica</i>	poultice, laxative, anti-inflammatory
Myrrh ¹¹⁹	<i>Commiphora myrrha</i>	anti-inflammatory, diuretic, laxative, purgative, disinfectant
Myrtle ¹²⁰	<i>Myrtus communis</i>	astringent, antiseptic
Olive Leaves, Oil ¹²¹	<i>Olea Europea</i>	astringent, antiseptic, unguent.
Ox-Tongue Leaves ¹²²	<i>Picris radicata</i>	anthelmintic
Papyrus Pith, Stems, Sedge ¹²³	<i>Cyperus papyrus</i>	anti-inflammatory.
Black Pea/ Black Bitter Vetch ¹²⁴	<i>Lathyrus niger</i>	
Edible Pea Grass ¹²⁵	<i>Lathyrus sativus</i>	
Garden Pea ¹²⁶	<i>Pisum sativum, elatius</i>	
Rough Pea Vine ¹²⁷	<i>Lathyrus hirsutus</i>	
Panic Grass ¹²⁸	<i>Panicum repens</i>	
Paradoxical Canary Grass ¹²⁹	<i>Phalaris paradoxa, Phalaris praemorsa</i>	
Persea Tree Leaves ¹³⁰	<i>Mimusops laurifolia</i>	astringent, anthelmintic,

¹¹⁴ Margaret Grieve, *A Modern Herbal*, 507-509; Christian De Vartavan, *Hidden Fields of Tutankhamun*, 58.

¹¹⁵ Irene Jacob, *The Healing Past*, 41; John Nunn, *Ancient Egyptian Medicine*, 152, 154, 215.

¹¹⁶ Margaret Grieve, *A Modern Herbal*, 523-524.

¹¹⁷ John Nunn, *Ancient Egyptian Medicine*, 152.

¹¹⁸ Margaret Grieve, *A Modern Herbal*, 567-569.

¹¹⁹ John Nunn, *Ancient Egyptian Medicine*, 94-95, 215; James P. Allen, *The Art of Medicine in Ancient Egypt*, 109, 115.

¹²⁰ John Nunn, *Ancient Egyptian Medicine*, 152, 215; Irene Jacob, *The Healing Past*, 41.

¹²¹ F. Nigel Hepper, *Pharaoh's Flowers*, 16.

¹²² Margaret Grieve, *A Modern Herbal*, 605-606.

¹²³ John Nunn, *Ancient Egyptian Medicine*, 14, 72, 152; Irene Jacob, *The Healing Past*, 44.

¹²⁴ John Nunn, *Ancient Egyptian Medicine*, 152.

¹²⁵ John Nunn, *Ancient Egyptian Medicine*, 152.

¹²⁶ John Nunn, *Ancient Egyptian Medicine*, 152.

¹²⁷ John Nunn, *Ancient Egyptian Medicine*, 152.

¹²⁸ Christian De Vartavan, *Hidden Fields of Tutankhamun*, 46-47.

¹²⁹ Christian De Vartavan, *Hidden Fields of Tutankhamun*, 46-47.

		antipyretic.
Pomegranate ¹³¹	<i>Punica granatum</i>	anthelmintic, antibacterial, antidiarrheal, astringent
Poppy ¹³²	<i>Papaver rhoeas</i> , <i>Papaver somniferum</i>	narcotic, analgesic
Prickle Grass ¹³³	<i>Crypsis</i>	
Purple Galingale/ Nut Grass ¹³⁴	<i>Cyperus rotundus</i>	anti-inflammatory, antipyretic, anti-malarial
Safflower Oil, Seeds ¹³⁵	<i>Carthamus tinctorius</i>	laxative, antipyretic
Sedge ¹³⁶	<i>Carex divisa</i>	diuretic.
Sesame Oil, Seeds ¹³⁷	<i>Sesamum indicum</i>	unguent, poultice, laxative, diuretic
Slender Meadow Foxtail/ Black Twitch/ Black Grass* ¹³⁸	<i>Alopecurus myosuroides</i>	diuretic, demulcent
Sorghum ¹³⁹	<i>Sorghum arundinaceum</i> , <i>Sorghum bicolor</i>	diuretic, demulcent
Sycamore ¹⁴⁰	<i>Ficus sycomorus</i>	poultice, antiseptic.
Syrian Mesquite/ Dwarf Mesquite ¹⁴¹	<i>Lagonychium farctum</i> / <i>Prosopis farcta</i>	diuretic, poultice, unguent.
Tamarisk ¹⁴²	<i>Tamarix</i>	anti-inflammatory, astringent, anthelmintic, unguent.

¹³⁰ John Nunn, *Ancient Egyptian Medicine*, 152, 154, 215.

¹³¹ John Nunn, *Ancient Egyptian Medicine*, 15, 72, 152.

¹³² Lise Manniche, *An Ancient Egyptian Herbal*, 130; Ana Maria Rosso. "Poppy and Opium in Ancient Times: Remedy or Narcotic?"; 81-87; John Nunn, *Ancient Egyptian Medicine*, 151-152.

¹³³ Christian De Vartavan, *Hidden Fields of Tutankhamun*, 46.

¹³⁴ Sri Ranajani Sivapalan. "Medicinal Uses and Pharmacological Activities of *Cyperus rotundus* Linn-A Review." *International Journal of Scientific and Research Publications* 3 (2013): 1-8.

¹³⁵ Lise Manniche, *An Ancient Egyptian Herbal*, 83; John Nunn, *Ancient Egyptian Medicine*, 15.

¹³⁶ John Nunn, *Ancient Egyptian Medicine*, 14.

¹³⁷ Lise Manniche, *An Ancient Egyptian Herbal*, 147.

¹³⁸ Margaret Grieve, *A Modern Herbal*, 370; Christian De Vartavan. *Hidden Fields of Tutankhamun*, 58.

¹³⁹ Margaret Grieve, *A Modern Herbal*, 130.

¹⁴⁰ Lise Manniche, *An Ancient Egyptian Herbal*, 103-105; John Nunn, *Ancient Egyptian Medicine*, 15, 72, 85, 90, 131, 152, 154; James P. Allen, *The Art of Medicine in Ancient Egypt*, 61, 98-99 102-103; Irene Jacob, *The Healing Past*, 36.

¹⁴¹ Irene Jacob, *The Healing Past*, 48.

¹⁴² Lise Manniche, *An Ancient Egyptian Herbal*, 149-150; John Nunn, *Ancient Egyptian Medicine*, 152; Irene Jacob, *The Healing Past*, 38.

Terebinth ¹⁴³	<i>Pistacia palaestina</i>	poultice, antiseptic, unguent.
Thyme* ¹⁴⁴	<i>Thymallus vulgaris</i>	anthelmintic, laxative, carminative.
Watercress ¹⁴⁵	<i>Lepidium sativum</i>	antipyretic.
Watermelon ¹⁴⁶	<i>Citrullus lanatus</i>	to treat blood vessel disorders, laxative, carminative, anti-inflammatory, unguent, poultice.
White Goosefoot ¹⁴⁷	<i>Chenopodium album/iranicum</i>	anti-inflammatory, anti-diarrheal
Willow ¹⁴⁸	<i>Salix subserrata</i>	analgesic, antipyretic, anti-inflammatory, treatment of broken limbs
Wine ¹⁴⁹		vessel for the administration of medicinal substances
Withania Nightshade ¹⁵⁰	<i>Withania somnifera</i>	sedative, analgesic.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20

Bibliography

- Aldred, Cyril. *Akhenaten: King of Egypt*. London: Thames and Hudson, 1988.
- Allen, James P. *The Art of Medicine in Ancient Egypt*. New York: The Metropolitan Museum of Art, 2005.
- Ashrafian, H. "Familial epilepsy in the pharaohs of ancient Egypt's eighteenth dynasty," *Epilepsy & Behavior* 25, (2012): 23-31.
- Carter, Howard. *The Tomb of Tut.ankh.amen Volume 3: The Annexe and Treasury*. London: Cassell & Company Ltd., 1923.
- Collins, Paul. *Discovering Tutankhamun*. Oxford: Ashmolean Museum, 2014
- Dasen, Veronique. *Dwarves in Ancient Egypt and Greece*. Oxford: Oxford University Press, 1993.
- De Garis Davies, Norman. *The Rock Tombs of el-Amarna, Parts III and IV*. London: Egypt Exploration Society, 1903.
- De Vartavan, Christian. *Hidden Fields of Tutankhamun: From Identification to Interpretation of Newly Discovered Plant Material From the Pharaoh's Grave*. London: Triade Exploration, 2002.

¹⁴³ Irene Jacob, *The Healing Past*, 44, 76.

¹⁴⁴ Irene Jacob, *The Healing Past*, 44; John Nunn, *Ancient Egyptian Medicine*, 15.

¹⁴⁵ Margaret Grieve, *A Modern Herbal*, 845.

¹⁴⁶ Irene Jacob, *The Healing Past*, 45; John Nunn, *Ancient Egyptian Medicine*, 15, 152.

¹⁴⁷ Margaret Grieve, *A Modern Herbal*, 857.

¹⁴⁸ Irene Jacob, *The Healing Past*, 45; John Nunn, *Ancient Egyptian Medicine*, 152.

¹⁴⁹ John Nunn, *Ancient Egyptian Medicine*, 72, 140; James P. Allen, *The Art of Medicine in Ancient Egypt*, 68.

¹⁵⁰ John Nunn, *Ancient Egyptian Medicine*, 151; F. Nigel Hepper, *Pharaoh's Flowers*, 18.

- 1 Dobbs, Matthew B. *et al.* "Treatment of Idiopathic Clubfoot: A Historical Review," *The*
 2 *Iowa Orthopedic Journal* 20 (2000): 59-64.
- 3 Dodson, Aidan. *Amarna Sunset: Nefertiti, Tutankhamun, Ay, Horemheb and the Egyptian*
 4 *Counter-Reformation*. New York: American University in Cairo Press, 2009.
- 5 Dodson, Aidan, ARCE Conference Feedback to Alexandra Morris, American Research
 6 Center in Egypt Conference, Kansas City, Missouri, April 21, 2017.
- 7 Eaton-Krauss, Marianne. *The Thrones, Chairs, Stools, and Footstools from the Tomb of*
 8 *Tutankhamun*. Oxford: Griffith Institute, 2008.
- 9 Eaton-Krauss, Marianne. *The Unknown Tutankhamun*. New York: Bloomsbury
 10 Academic Press, 2016.
- 11 Filer, Joyce. *Disease*. Austin: University of Texas Press, 1995.
- 12 Flinders Petrie, W. M. *Deshasheh*. London: Egypt Exploration Fund, 1897.
- 13 Fowler, Brenda. "Forgotten Riches of King Tut: His Wardrobe," *The New York Times*,
 14 July 25, 1995.
- 15 Grieve, Margaret. *A Modern Herbal*. New York: Dover, 1971.
- 16 Griffith, Francis Ll. *The Petrie Papyri: Hieratic Papyri from Kahun and Gurob*. London:
 17 Quaritch, 1898.
- 18 Griggs, Mary Beth. "New Theory: King Tut Died in a Chariot Crash," *Smithsonian*,
 19 November 4, 2013, <http://www.smithsonianmag.com/smart-news/new-theory-king-tut-died-in-a-chariot-crash-180947562/>
- 20 Haj, Fared. *Disability in Antiquity*. New York: Philosophical Library, 1970.
- 21 Harer Jr, W. Benson "Pharmacological and Biological Properties of the Egyptian Lotus,"
 22 *Journal of the American Research Center in Egypt* 22 (1985): 49-54.
- 23 Hawass, Zahi *et al.* "Ancestry and Pathology in King Tutankhamun's Family," *Journal*
 24 *of the American Medical Association* 303 (2010): 638- 647.
- 25 Hawass, Zahi. *Discovering Tutankhamun: From Howard Carter to DNA*. New York: The
 26 American University in Cairo Press, 2013.
- 27 Hawass, Zahi. *The Golden King: The World of Tutankhamun*. (Washington DC: National
 28 Geographic, 2006.
- 29 Hepper, F. Nigel. *Pharaoh's Flowers: The Botanical Treasures of Tutankhamun*. London:
 30 HMSO, 1990.
- 31 Idro, Richard *et al.* "Cerebral Malaria: Mechanisms of Brain Injury and Strategies for
 32 Improved Neuro-Cognitive Outcome," *Pediatric Research* 68.4 (2010): 267-274.
- 33 Jacob, Irene and Walter Jacob. *The Healing Past: Pharmaceuticals in the Biblical and*
 34 *Rabbanic World*. Leiden: Brill, 1993.
- 35 Lewis, Walter H., and Memory P.F. Elvin-Lewis. *Medical Botany: Plants Affecting Man's*
 36 *Health*. New York: J. Wiley and Sons, 1977.
- 37 Loeben, Christian. "La Fonction Funeraire des Meubles Egyptiens," *Egypte, Afrique &*
 38 *Orient* 3 (1996): 20-27.
- 39 Lorenzi, Rossella. "King Tut Re-Creation Presents a Shocking Image," *Discovery News*,
 40 2014.
- 41 Mahran, Heba and Samar Mostafa Kamal, "Physical Disability in Old Kingdom Tomb
 42 Scenes," *Athens Journal of History* 2.3 (2016): 169-191.
- 43 Malek, Jaromir. *Egypt: 4000 Years of Art*. New York: Phaidon Press, 2003.
- 44 Manniche, Lise. *An Ancient Egyptian Herbal*. London: British Museum Press, 2006.
- 45 Marchant, Jo. *The Shadow King: The Bizarre Afterlife of King Tut's Mummy*. New York:
 46 Da Capo Press, 2013.
- 47 Martin, Geoffrey T. *The Tomb of Maya and Meryt: The Reliefs, Inscriptions and*
 48 *Commentary*. London: Egypt Exploration Society, 2012.
- 49

- 1 Maugh II, Thomas H. "CT Scan convince Egyptian researchers that King Tutankhamun
2 wasn't murdered," *Los Angeles Times*. March 9, 2005.
- 3 Mayo Foundation for Medical Education and Research, "Diseases and Conditions:
4 Clubfoot," Mayo Clinic, last modified 2014, [http://www.mayoclinic.org/diseases-
5 conditions/clubfoot/basics/definition/conV20027211](http://www.mayoclinic.org/diseases-conditions/clubfoot/basics/definition/conV20027211)
- 6 Morris, Alexandra F. "Let the Artifacts Speak: A Look at the Physically Disabled of
7 Ancient Egypt." MA Thesis, University of Pennsylvania, June 2014.
- 8 Nunn, John. *Ancient Egyptian Medicine*. Norman: University of Oklahoma Press, 1996.
- 9 Phillips, Stephen. "Pharaoh's Flowers: Botanical Treasures from the Fabled Tomb of
10 Tutankhamun," Public Lecture, Event from the Pennsylvania Museum of
11 Archaeology and Anthropology, Philadelphia, May 19, 2013.
- 12 Reeves, Carol. *Egyptian Medicine*. Buckinghamshire: Shire Publications, 2001.
- 13 Reeves, Nicholas. *The Complete Tutankhamun*. London: Thames and Hudson, 1990.
- 14 Robins, Gay. *The Art of Ancient Egypt*. Cambridge: Harvard University Press, 2008.
- 15 Rosso, Ana Maria. "Poppy and Opium in Ancient Times: Remedy or Narcotic?"
16 *Biomedicine International* 1 (2010): 81-87.
- 17 Silverman, David P. *Masterpieces of Tutankhamun*. New York: Abbeville Press, 1978.
- 18 Sivapalan, Sri Ranajani. "Medicinal Uses and Pharmacological Activities of *Cyperus*
19 *rotundus* Linn- A Review." *International Journal of Scientific and Research*
20 *Publications* 3 (2013): 1-8.
- 21 Stoddert Gilbert, Katherine, et. al. *Treasures of Tutankhamun*. New York: Bantam, 1976.
22 Traveling Museum Exhibition, *The Discovery of King Tut*, Premier Exhibitions 5th
23 Avenue, New York, New York.
- 24 Tyldesley, Joyce. *Tutankhamen: The Search for an Egyptian King*. New York: Basic
25 Books, 2012.
- 26 UPenn Museum, "Mummy Skeleton Man," last modified 2017,
27 <https://www.penn.museum/collections/object/171752>
- 28 Velmeijer, Andre J. *Tutankhamun's Footwear: Studies of Ancient Egyptian Footwear*.
29 Leiden: Sidestone Press, 2011.
- 30 Vogelsang-Eastwood, Gillian M. *Tutankhamun's Wardrobe*. Rotterdam: Barjesteh van
31 Waalwijk van Doorn & Company's Uitgeversmaatschappij, 1999.
- 32 Wilkinson, Toby A. H. *Early Dynastic Egypt*. New York: Routledge, 1999.
- 33 Winlock, Herbert Eustis & Dorothea Arnold. *Tutankhamun's Funeral*. New York:
34 Metropolitan Museum of Art, 2010.
- 35 Wreszinski, Walter. *Medizin der Alten Ägypter: Band III: "Der Papyrus Ebers."* Leipzig,
36 1913.
37
38
39