Genus *Homo*

Early *Homo*: 2.0 – 1.4 mya

Early Transitional Humans

- Family Hominidae (humans, chimps, bonobos)
- Tribe Hominini (Hominina): humans
- Genus: *Australopithecus*
- Genus: *Homo*
- Modern people: *Homo sapiens*

Habitual bipeds

**Homo habilis/rudolfensis**

*Homo habilis* (2.0 – 1.5 mya)

*Homo rudolfensis* (2.4 – 1.9 mya)
Climate Change: 2.5 MYA

Olduvai Hominids 7 & 23
- Louis and Mary Leakey, 1960, OH7
- *Homo habilis* (*"handy or skilled human"")
- stone tools

East Lake Turkana (Rudolf) Koobi Fora: ER1470, ER1813, ER1590: *Homo rudolfensis*
Other early *Homo*

- Omo, Ethiopia
- Sterkfontein: STW 53
- Swartkrans: SK 80/846/847

*Homo habilis*? 

---

**Early Humans & Australopithecines**

- Early *Homo*
- Late gracile australopithecine

**Homo habilis** cranial capacity: 650 cc (500-800 cc)
Teeth

OH65

OH67

Body Size

Koobi Fora, Lake Turkana, Kenya

ER1470

1.8-1.6 mya
Bipedalism

A. boisei and Modern Human

Early Hominins and Their Immediate Ancestors
Early Australopithecine Species

- *Australopithecus anamensis*
- 4.2-3.9 MYA, East Africa

*Australopithecus anamensis*

---

*Australopithecus afarensis*

- 4.0 – 2.9 MYA
- East Africa
- Hadar, Ethiopia
- Laetoli, Tanzania
- "Lucy"
- *Kenyanthropus platyops*?
- *A. bahrelghazali*?

*Australopithecus afarensis*

---

*Australopithecus africanus*

- 3.3 – 2.3 MYA
- East & South Africa

*Australopithecus africanus*
Australopithecus gahri

- 2.5 MYA
- East & South Africa

Early & Late Australopithecines

- Gracile
- Robust

Australopithecus aethiopicus

- 2.5 MYA
- East Africa
**A. robustus**

- South Africa
- 2.0 – 1.5 MYA

**A. boisei**

- John Robinson’s Dietary Hypothesis

<table>
<thead>
<tr>
<th>Muscle</th>
<th>Robust</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 - 4.5 ft. (108 lbs)</td>
<td>4.5 - 5 feet (138 lbs)</td>
</tr>
<tr>
<td>smaller c.c. 442 cc</td>
<td>larger c.c. 550 cc</td>
</tr>
<tr>
<td>more rounded braincase</td>
<td>Enlarged braincase</td>
</tr>
<tr>
<td>more vertical forehead</td>
<td>Enlarged vault and flattened forehead</td>
</tr>
<tr>
<td>dish-shaped lightly built face</td>
<td>Sagittal crest (larger temporalis)</td>
</tr>
<tr>
<td>comparatively larger front teeth</td>
<td>Larger back teeth (mesial crowding of ant. teeth rel. to front teeth)</td>
</tr>
<tr>
<td>smaller jaws</td>
<td>Larger jaws</td>
</tr>
</tbody>
</table>

**Note:**
- 1 MYA: Much shorter time than current species.
- 1 MYA: Modern anatomical linearity.
- 1 MYA: Neanderthal origins.
- 1 MYA: Hominid remains from Africa.
- 1 MYA: Australian hominids.
- 1 MYA: Middle Eastern hominids.
- 1 MYA: European hominids.
Body Size

Australopithecus afarensis (right); chimpanzee (left); modern human (center).

Ardipithecus ramidus

- Tim White
- 1992
- Middle Awash, N. Ethiopia

Phylogenetic Interpretations/Timeline

- Most inhabiting arboreal habitats
- Diets of the large-tooth hominins: tough fibrous foods/roots
- Little evidence for increased body or brain size
- Accelerated growth
- Small bipedal creatures
Change in Environment 2.5 mya

Serengeti, Tanzania (Photo: Pietrusewsky, 2011)

Early Human Culture

Stone tools
New Subsistence
Occupation of new environments

Stone Tool Technology

• 2.5 million years ago
• stone cobbles
• Gona River Region of Ethiopia
• stone flakes
Oldowan Tools
1 - 1.5 mya

Stone cobbles and stone flakes

Osteodontokeratic Tradition
bone/tooth/horn

- Raymond Dart
- Acheulian (H. erectus)

Hunting or Scavenging?
Home Bases?