

Ethiopian meat (beef) cut

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RÉSUMÉ

TSEHAY NEWAY et FESEHA GEBREAB. — Découpe éthiopienne de la viande de bœuf. *Rev. Elev. Méd. vét. Pays trop.*, 1985, 38 (1) : 97-105.

Les bases de la découpe de bœuf ont été déterminées lors d'une étude à Debre-Zeit et dans les environs en Ethiopie. Les douze principaux morceaux sont les suivants : Shent, Bete Salegegne, Tanash, Fremba, Talak, Mehal ageda, Nebro, Tuncha, Goden te dabit, Gebeta, Sebrada et Werch.

Leur composition musculaire essentielle a été mise en évidence et a permis la classification anatomique des morceaux.

Mots clés : Bovin - Viande de bœuf - Découpe - Ethiopie.

SUMMARY

TSEHAY NEWAY and FESEHA GEBREAB. — Ethiopian meat (beef) cut. *Rev. Elev. Méd. Vét. Pays trop.*, 1985, 38 (1) : 97-105.

An attempt has been made to study and establish the basis of beef cuts in one part of Ethiopia. Twelve major cuts are now known to occur. They are : Shent, Bete Salegegne, Tanash, Fremba, Talak, Mehal ageda, Nebro, Tuncha, Goden te dabit, Gebeta, Sebrada and Werch. Their major myological constituents have been determined and have allowed the anatomical classification of the cuts.

Key words : Cattle - meat - Cut - Ethiopia.

INTRODUCTION

Meat is one of the most universally liked foods (3) and people, in all parts of the world, have established their own way of cutting and preparing meat for consumption. Therefore, there are now, in every civilized society, traditionally accepted modes of cutting meat. Different cuts of meat vary greatly in tenderness and it is possible that the cuts are prepared with the state and mode of consumption in mind. There are established patterns of cutting meat for wholesale and retail markets, and cooking the various kinds, grades and cut's of meat. Whatever the case may be, it is advantageous to the consumer to be familiar with the kinds of cuts of meat.

The purpose of this study is therefore to supply information on meat cut patterns prevailing in Debre Zeit and its surroundings.

To our knowledge so far no attempt has been done to scientifically determine and establish the basis of meat cuts in Ethiopia. A trial has been made to identify meat cuts, and know where they come from in the carcass.

MATERIALS AND METHODS

The areas of study are Debre Zeit, Modjo, Nazareth, Dukam, and their surroundings. At the beginning, observation and detailed analysis was done on a year old steer slaughtered in the Faculty of Veterinary Medicine in June of 1982. Further studies were conducted on a total of forty animals slaughtered in the traditional manner for the purpose of collective consumption known as KIRCHA (a practice which involves the fragmentation of the various large cuts into a

number of predetermined equal parts). Traditional retail shops were also visited where systematic observations were done and relevant informations on the nature of primary cuts were collected. Supplementary facts were gathered from butchers, elders and consumers.

The nomenclature adapted and used are those of *Nomina Anatomica Veterinaria*, 1968. The Amharic names are those that are normally used in everyday language to describe the various cuts and portions.

RESULTS AND DISCUSSION

Traditional Ethiopian meat cuts are derived following certain guiding lines along skeletal reference points. The fact is that no two meat cut of similar origin are identical. The uniformity of the cut largely depends upon the experience and skill of the butcher and the sharpness of the knives at his disposal. The meat cuts are obtained in an established orderly sequence and manner following the removal of the feet hides, excess adipose tissue, viscera and offal. The majority of the cuts are aggregate of several muscles and bones while the boneless ones are few in number. In urban areas, marketing trends have influenced the institution of certain changes in traditional meat cutting patterns. This has led to the setting of an association of some meat portions of inferior quality with traditionally recognized first class cuts. The traditional Ethiopian meat cuts are presented below.

Shent (Fig. 1)

This cut is rated first class. The word in Amharic applies to the backbone eventhough the portion has some pieces from the neck and rump. Its anatomical constituents are *Musculus longissimus dorsi*, *M. iliocostalis*, *M. spinalis*, *M. semispinalis*, *M. multifiedi*, *M. retractor costae*, and *M. gluteus profundus* (1,2). The qualities enshrined in shent as a cut is that it is long and slender and largely made of soft and juicy flesh with the exception of a small portion that belongs to *M. retractor costae* (1,2) which is not tender. The epimycium of most of the muscles is covered with fat. The shent that is made available by town butchers is characterized by a certain degree of digression from the traditional cuts. In most

of the cases urban butchers present shent as an aggregate of SEBRADA (a cut including the last two ribs), ribs from BETE SALEGEGNE (a cut which is always subject to changes in uniformity since it is obtained among the list in the established sequence), GODEN TE DABIT (ribs and the rhomboid muscle) and DENDES (half of the vertebral column in abattoir slaughtered carcasses) (Fig. 1a).

Shent is number one in choice for raw consumption. It is also enjoyed as panbroil or braise. It is in fact a well esteemed gift that can be presented to close friends, relatives, etc.

Bete salgegne (Fig. 2)

This cut is also rated first class. The words in Amharic apply to the difficulty in obtaining this cut in predetermined uniform pieces since it is always subject to variations due to its position in the carcass. Its commercial value as well as its status as a cut varies with the amount of fat it carries. It is a combination of part of the shoulder, ribs and brisket. Its myological constituents are : *Musculi intercostales externi et interni* between the 8th, 9th, 10th, and 11th ribs, most of the diaphragm, *Musculus trapezius*, *M. omotransversarius*, major part of *M. latissimus dorsi*, a small piece of *M. brachiocephalicus*, *Mm. levatores costarum* of the 8th, 9th, 10th, and 11th ribs and part of *M. serratus dorsalis* (1,2). With the exception of *Mm. intercostales externi et interni*, the diaphragm, *Mm. levatores costarum* and *M. serratus dorsalis* which are partly invested with connective tissue (aponeurotic), most of the muscles constituting the cut are fleshy (1). In humped animals which is the characteristic trait of the zebu breed, *M. trapezius* is well marbled and its dorsal part is termed SHAGNA in the Amharic language. Consumers in urban areas often find bete salgegne in the form of a cut combined with GEBETA (a cut which is said to be bare or naked), and GODEN TE DABIT (ribs and the rhomboid muscle (Fig. 2a).

This cut is also honored among its ranks by being a meat of choice for raw consumption and as item of gift to beloved and respected people.

Tanash (Fig. 3)

The Amharic name signifies that this particular cut is smaller than its opposite

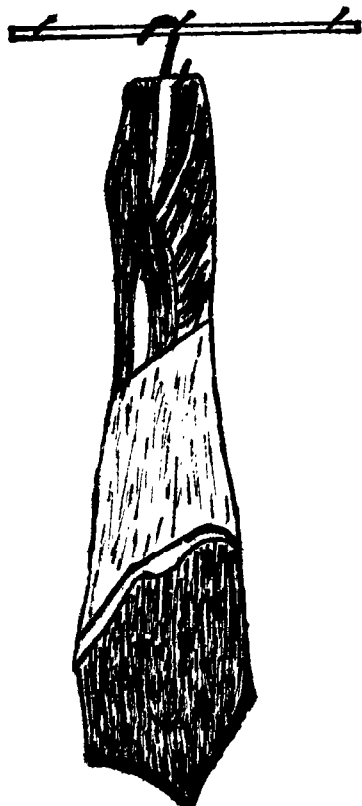


Figure 1 SHENT

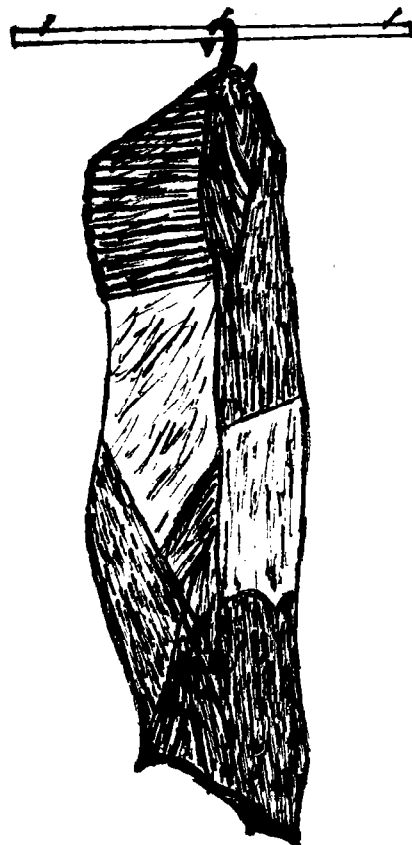


FIGURE 1a (SHENT)



Figure 2 BETE SALEGEGNE

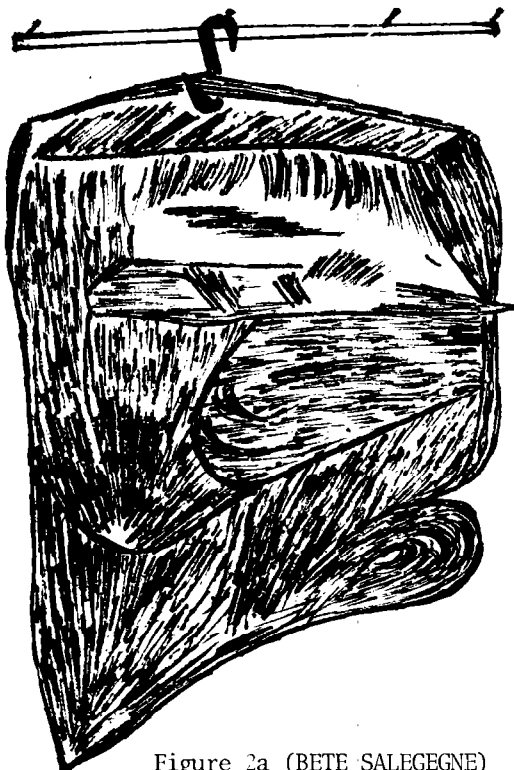


Figure 2a (BETE SALEGEGNE)

known as TALAK (big cut). Its muscular components are : *Musculus tensor fascia lata*, *M. gluteobiceps*, *M. semitendinosus*, and *M. gracilis* (1,2). Half of the sacrum and the first 2-3 caudal vertebrae together with their muscles (*M. sacrocaudalis*, *Mm. intertransversarii caudae* and *M. levator ani et coccygeus*) are also constituent parts of this cut. *M. gluteobiceps* and *gracilis* are entirely fleshy whereas *M. tensor fascia lata* has a small part which is aponeurotic (invested with connective tissue) (1).

M. semitendinosus, as its name implies, is infiltrated with tendons (1). Because of its tough consistency, it is usually rejected for consumption as raw. Its Amharic name (SHULUDA) also signifies its structure in a similar manner to its latin counterpart. The remaining part of TANASH is composed of soft and juicy muscles impregnated with a considerable amount of fatty tissue. This cut is rated second class and is consumed raw and cooked.

Fremba (Fig. 4)

This cut is derived from the fleshy part of the breast, short plate and the flank with the exclusion of the sternum and ribs. In more specific terms, the name FREMBA refers to *M. pectoralis superficialis et profundus*. Its muscular components are composed of *M. pectoralis superficialis et profundus*, most of *M. brachiocephalicus*, *M. sternocephalicus*, *M. sternothyroideus*, *M. omohyoideus*, the aponeurotic portions of *M. obliquus abdominis externus et internus* and that of *M. transversus abdominis* and a small part from the cervical part of *M. trapezius* (1,2). With the exception of the *omohyoideus* and the oblique and transverse abdominal muscles which are aponeurotic, the cut is composed of fleshy muscles well impregnated with fat. It ranks 3rd grade as a cut and is consumed raw by elders while it is popularly eaten as braise and pan broil.

Talak (Fig. 5)

In spite of the small pieces of ischiatic and pubic bones it contains, it is considered as boneless cut. The bones serve for hanging the meat on a hook. The muscular constituents of this cut are : *M. sartorius*, *M. semimembranosus*, *M. pectineus*, *M. adductor*, *M. obturatorius*, *M. quadratus femoris* and *M. gemellus* (1,2). These muscles are entirely fleshy and are

of large size (1). It is the meat of choice for the preparation of the national dish known as « KITFO » (tartar beef steak).

Mehal ageda (Fig. 6)

It is made up of one muscle : *M. quadriceps femoris* (1,2). The bone *patella* is associated with it and serve as a hanging end on hooks. The Amharic name literally means « CENTRAL CANE » because of its central location covered by TANASH on the lateral side and TALAK on the medial aspect. This cut is used mainly for the preparation of the popular dish known as « KITFO ».

Nebro (Fig. 7)

This cut is made up of *Musculus gastrocnemius* which is a large fleshy meat (1,2). Its belly as well as its origin and insertion are infiltrated with tendon (1).

The Amharic name literally means the tiger which refers to the strength of the muscle whose fibrillation is also considered to be similar to the expressions of the furious animal during moments of wrath. It is the meat of choice for raw consumption by war veterans and brave men not because it is tendinous, but due to its hard consistency. It is also consumed as braise.

Tuncha (Fig. 8)

This cut is made up of the extensors and flexors of the leg and foot excluding *Musculus gastrocnemius*. They are : *M. extensor digitorum longus*, *M. extensor digitorum lateralis*, *M. extensor digitorum brevis*, *M. fibularis longus*, *M. fibularis tertius*, *M. tibialis cranialis*, *M. extensor digiti I longus*, *M. soleus*, *M. flexor digitorum superficialis*, *M. flexor digitorum profundus* and *M. popliteus* (1,2). In their sites of origin, the muscles of this cut are fleshy while they infiltrated with tendons in their sites of insertion (1). Some of the components of this cut are entirely tendinous (1). It is commonly consumed braised.

Nekela or nikay (Fig. 9)

The name is given to a large cut composed of TALAK, MEHAL, AGEDA, NEBRO and TUNCHA with bones of the thigh and leg. Such a cut is commonly available in retail shops. It provides convenience to consumers in

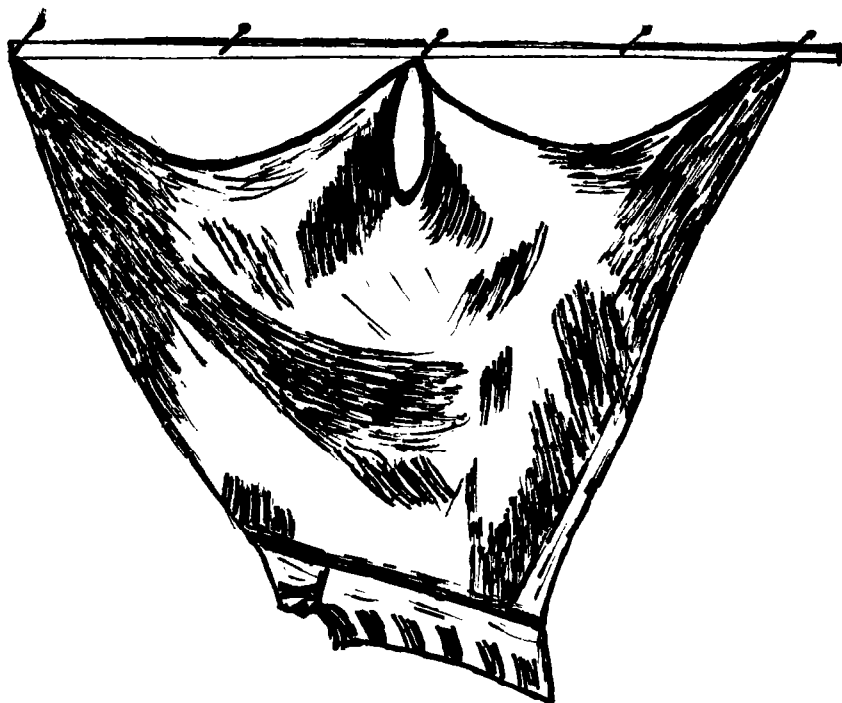


Figure 3 TANASH



Figure 4 FREMBA

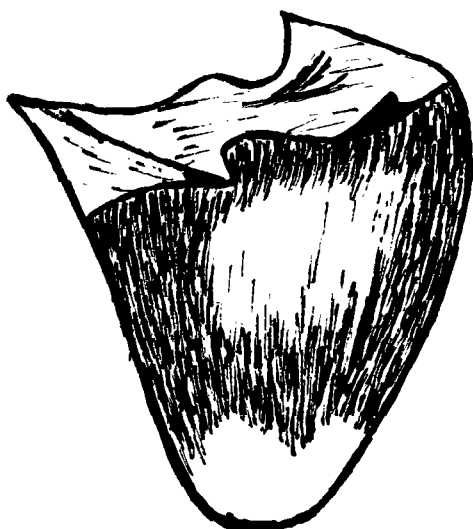


Figure 5 TALAK



Figure 6 MEHAL AGEDA



Figure 7 NEBRO



Figure 8 TUNCHA



Figure 9 NEKELA OR NIKAY



FIGURE 10 GODEN TE DABIT

that it allows the separation of portions carrying representative flesh from the various cuts. The retailer has also the advantage of clearing the meat available by selling portions in accordance with the consumers taste and demand. The Amharic name signifies that this cut is obtained by the dislocation of the hip joint.

Goden te dabit (Fig. 10)

This cut is made up of the first seven ribs the scapular cartilage *Musculi intercostales externi et interni* between the first seven ribs, most of *Musculus serratus ventralis*, *M. levatores costarum* of the first seven ribs, *M. rhomboideus*, *M. splenius*, part of *Mm. obliquus capitis cranialis et caudalis* and part of *M. serratus dorsalis cranialis* (1,2).

The Amharic name « GODEN TE DABIT » denotes that the cut is made of the ribs and the rhomboid muscle. Most of the muscles are infiltrated with connective tissue fibers. The only exceptions are the *rhomboideus* and the *splenius* muscles which are fleshy and marbled (1). The *rhomboideus* (DABIT) is most liked by raw consumers while the rest is eaten cooked.

Gebeta (Fig. 11)

This is a cut made of the inner part of the breast, short plate, flank and brisket. It is composed of half of the sternum, asternal ribs with their cartilages, *Musculi intercostales externi et interni* along the costal arch, *Mm. obliquus et transversus abdominis*, *M. rectus abdominis*, *M. rectus thoracis*, *M. scalenus*, pieces from *M. brachiocephalicus* and *M. serratus ventralis* and part of *M. sternocephalicus* (1,2). The muscles are partly fleshy, partly aponeurotic and partly tendinous (1). The name « GEBETA » means bare or naked which implies the removal of fremba from it. In urban cuts, set by butchers, it is presented associated with Bete Salegegne. It is consumed as panbroil and braise.

Sebrada (Fig. 12)

The term « SEBRADA » is applied to the last two floating ribs in man and the last two ribs in cattle. Its muscular components are *Musculi intercostales externi et interni* of the last two ribs, fleshy part of *Mm. obliquus abdominis externus et internus*, *Musculus levatores costarum* of the last two ribs, part of the dorsal diaphragm (lumbocostal part),

M. quadratus lumborum, *M. serratus dorsalis*, *M. psoas minor* and *M. iliopsoas* (*Mm. iliacus et psoas major*) (1,2). The last two muscles of this cut are soft and fleshy (1). The iliopsoas muscle is popularly known as « CHEKENA » (Fig. 13) and is composed of soft tender flesh and in most of the cases is sold as a separate cut. It is usually consumed roasted or panbroiled while the rest of the cut is used for braise.

Werch (Fig. 14)

The name refers to the shoulder and arm of cattle. The muscular components of this cut are: *Musculus supraspinatus*, *M. infraspinatus*, *M. subscapularis*, *M. triceps brachii*, *M. biceps brachii*, *M. brachialis*, *M. deltoideus*, *M. teres major*, *M. teres minor*, *M. tensor fascia antebrachii*, part of *M. brachii ocephalicus*, *M. pronator teres*, *M. anconeus*, *M. extensor carpi radialis*, *M. extensor digitorum communis*, *M. extensor digitorum lateralis*, *M. abductor digiti I longus*, *M. ulnaris lateralis*, *M. flexor digitorum profundus* and *M. flexor digitorum superficialis* (1,2). In addition to the ones mentioned pieces from *M. brachiocephalicus*, *Mm. pectoralis superficialis et profundus*, *M. serratus ventralis*, *M. latissimus dorsi*, *M. trapezius* and *M. omotraversarius* (1,2) are incorporated in small quantities. The osseous base is made up of the *scapula* and bones of the arm and *antebrachium*. The fleshy part of the cut are *M. triceps brachii*, *M. brachialis*, *Mm. teres minor et major*, *M. coracobrachialis*, *M. anconeus*, *M. supraspinatus*, *M. infraspinatus* and *M. subscapularis*. The rest of the meat cut is aponeurotic and heavily tendinous (1). The cut is traditionally regarded as a low grade meat which is usually eaten cooked.

Dendes

The portion designated as « DENDES » is not fit to be included amongst the ranks of proper meat cut. It represents a mass of bone starting from the atlas to the last lumbar vertebra and pieces of flesh detached from *Musculi multifidi*, *M. longissimus dorsi*, and *M. quadratus lumborum* (1,2).

ACKNOWLEDGEMENTS

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Figure 11 GEBETA

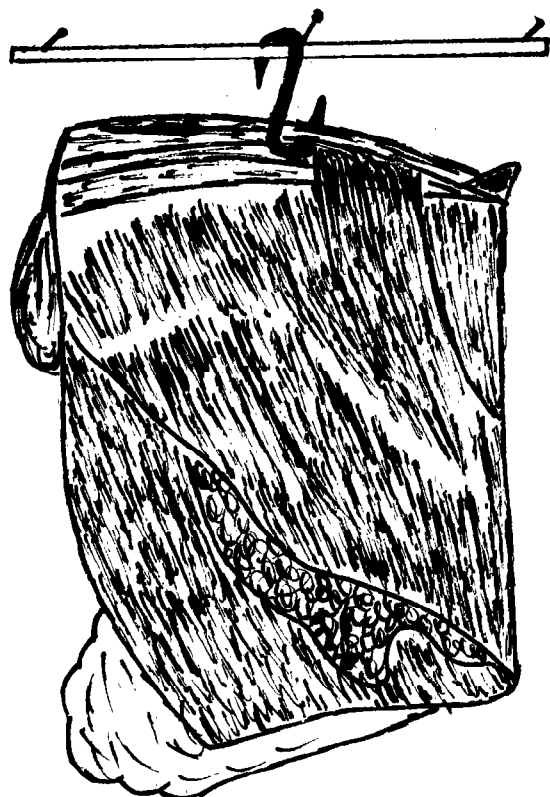


Figure 12 SEBRADA

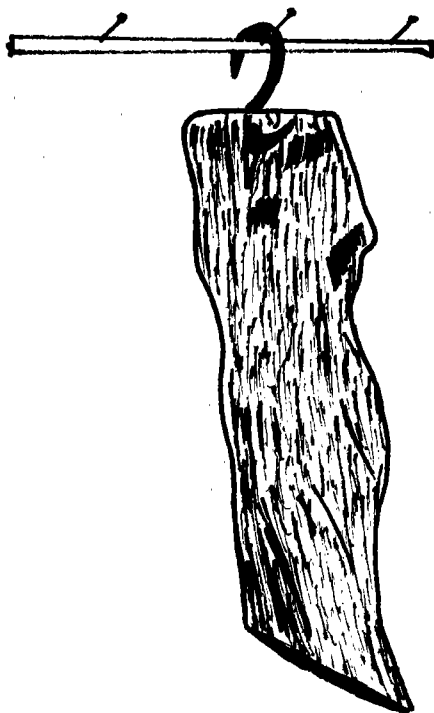


Figure 13 CHEKENA

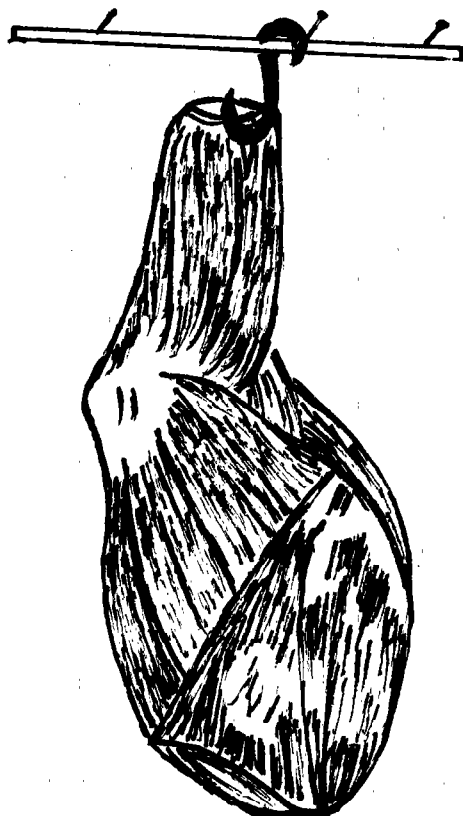


Figure 14 WERCH

RESUMEN

TSEHAY NEWAY y FESEHA GEBREAB. — Descuartizo de carne de vaca en Etiopia. *Rev. Elev. Méd. vét. Pays trop.*, 1985, **38** (1) : 97-105.

Se determinaron las bases del descuartizo de carne de vaca durante un estudio efectuado en Debre Zeit y en los alrededores, en Etiopia. Los doce principales pedazos son los siguientes : Shent, Bete Salegegne, Tanash,

Fremba, Talak, Mehal ageda, Nebro, Tuncha, Goden te dabit, Gebeta, Sebrada y Werch.

Se evidenció su composición muscular esencial que permitió establecer la clasificación anatómica de los pedazos.

Palabras claves : Bovino - Carne de vaca - Descuartizo - Etiopia.

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