Table 1 Major fatty acid (FA) proportions (g 100 g^{-1} of FA) of Creole goat according to diet (values with different superscripts, a and b, are different, $P < 0.01$)

Table 1a *intermuscular (IM) fat tissue*

C group	C0	C50	SE
DM, %	53,77[a]	64,23[b]	18,29
Lipid content, %	71,60	80,03	19,16
SFA	50,97[a]	46,47[b]	4,96
MUFA	35,13[a]	40,60[b]	4,95
PUFA	4,63	4,70	0,66
odd chain FA	3,87[a]	3,10[b]	0,64
n-6 FA	2,37[a]	3,10[b]	0,51
n-3 FA	1,07[a]	0,53[b]	0,21

Table 1b *supraspinus (SE) muscle tissue*

group	C0	C50	SE
DM, %	30,40	30,13	10,51
Lipid content, %	11,00	11,33	3,96
SFA	41,50	41,27	3,37
MUFA	37,20[a]	39,27[b]	2,48
PUFA	9,97	10,70	2,01
odd chain FA	3,73[a]	2,70[b]	0,40
n-6 FA	6,53[a]	8,97[b]	1,87
n-3 FA	2,40[a]	0,90[b]	0,43

Conclusion

The Creole goat shows the ability to be reared under intensive conditions while maintaining low proportions of fat in the meat. From a nutritional point of view, meat from kids fed all-forage diet seems very favorable. Focusing on FA which are supposed to have beneficial or adverse effects on human health, concentrate supplementation did not greatly alter the meat diet quality. Further studies are required to determine the best level of concentrate in the diet when taking into account carcass and meat traits.

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Nutritive Aspects of Goat Meat for Developing Countries

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Goat meat is widely eaten throughout the world. It is used more than other farmed animal meat in warmer climates. The dressed carcass of a goat commonly yields 40–55 percent of the live weight. The factors contributing to the variation are discussed. Over the years the tendency

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towards eating smaller kid goat meat has developed in many counties but more so in the tropical regions of the Indian subcontinent which includes Pakistan, India, Bangladesh, Nepal, Sri Lanka etc. An average carcass weight of 10–14 kg for the goat is considered normal but the tender meat of goats of dressed carcass weight as low as 3–4 kg has emerged for certain tastes. It is achieved by early slaughtering of teddy breeds of goats in India and Pakistan. Sometimes these small goats look like big cats roaming the slaughterhouse floors in these countries.

Quality traits of any kind of red meat can be divided into three broad lines, composition of the meat to indicate nutritive value, physical characteristics for visual acceptance and processing ease as it relates to the biochemical parameters indicative of normal processing treatments. Goat meat has brick red color and chalk white fat; both colors darken with the age of the animal. The processing characteristics of ***chevon*** are known to be as good as of other meats, so it can be easily put in place of beef or beefalo. In some respects like its use in emulsion products, it is as good as lamb and better than beef.

From the nutritional point of view goat meat is a very important source of animal protein in most developing countries, however, not enough research seems to have been carried out on its different nutritional properties and aspects. An average composition of goat meat is as follows, moisture 74–76%, protein 20.6–22.3%, fat 0.5–2.5% and ash about 1.0%. Chevon contains more essential amino acids like arginine, leucine and iso-leucine than sheep meat. Goat meat has a lesser fat content and appears to have more oleic acid in its fat depots than sheep. Goat meat has higher content of thiamine and riboflavin in the liver but it is low in niacin. Management factors and practices affect goat meat yield and meat quality, like tenderness and juiciness. The paper reviews most of the related aspects of goat meat to conclude some important points.

Table 1 *General chemical composition of goat meat from Asia.*

Components	India/Pakistan	Malaysia	Philippines
Moisture %	74.2	74.0	76.0
Proteins (g 100 g^{-1})	21.4	20.6	22.3
Fat (g 100 g^{-1})	2.6	2.2	0.6
Ash (g 100 g^{-1})	1.1	1.0	1.1
Calcium(Ca) (mg 100 g^{-1})	12	11	6
Phosphorus(P) (mg 100 g^{-1})	193	154	150
Iron (Fe) (mg 100 g^{-1})	–	2.1	0.4

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Vaginal cytology as a method of estrous determination in the female agouti (*Dasyprocta leporina*)

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Introduction

Intense devastation of tropical ecosystems has been observed in recent times, with irretrievable loss of neo tropical animal genetic resources. This degradation of tropical forests and wildlife has led to the need for innovations with regards to captive rearing of neo tropical animal species, in an attempt to conserve and produce animal protein for local consumption. The agouti (*Dasyprocta leprorina*) is a neo tropical rodent, found in Central and South America and the Caribbean. Current research suggests that the agouti possess tremendous potential for domestication and semi-commercial production.· Knowledge of reproductive physiology forms an integral part of captive breeding strategies. The manipulation of the reproductive cycle of the female agouti is a method of increasing the animal's fecundity. Vaginal cytology is a simple technique used to help characterize stages of the reproductive cycle of females and to evaluate certain diseases of the genital tract. Vaginal cytology is usually used in conjunction with the physical examination, clinical history, vaginoscopy, and hormonal assays to determine the stage of the reproductive cycle. This is especially important if artificial insemination is to be performed. The estrous cycle of the female agouti contains four stages that can be followed cytological. These stages are proestrus, estrus, diestrus, and metestrus and each stage is characterized by the presence, abscence and ratio of typical cell types.

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