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The Florida Market for Goat Meat: 1999 Survey of Florida Meat Wholesalers

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ABSTRACT

Out of 236 meat wholesalers in the state of Florida in 1999, 18 percent were found to sell goat meat. The most common reason for not selling goat meat was the lack of demand. Frozen carcasses and primals are the most common forms of goat meat product handled by Florida meat wholesalers and about 60 percent comes from Australia and about 33 percent from New Zealand. More than 75 percent of weekly wholesale goat meat is shipped out of Florida. Ethnic restaurants make up 63 percent of the demand for goat meat sold in Florida, followed by independent retailers with 25 percent, while individuals buy about 9 percent. Wholesalers indicated no problems with obtaining enough goat meat, and very few quality problems. Findings contrasted with a similar study conducted in 1986 showed that the number of Florida meat wholesalers handling goat meat has risen from 15 percent in 1986 to 18 percent in 1999. Since the 1986 survey, whole frozen carcasses have emerged as the leading product form, while whole fresh carcasses and frozen primals have declined. Domestic retail distribution has increased from 52 percent to 63 percent for grocers, and from 6 percent to 9 percent for individuals. Restaurant distribution declined from 32 percent in 1986 to 28 percent in 1999.

Prices paid by meat wholesalers have declined significantly over the past decade, especially for frozen carcasses and primals. In constant dollars terms, the weighted average price paid by meat wholesalers for all forms of goat meat declined by nearly 17 percent between 1986 and 1999. This price decline is thought to reflect lower producer prices. Part of the price reduction has been passed along to wholesalers' customers; prices received by meat wholesalers have declined by about nine percent over the same period.

Fresh goat carcasses command a significant premium over frozen carcasses and primals, about $1.10 per pound. However, the total market for fresh carcasses is quite small. Florida goat producers have a comparative advantage in serving the market for fresh carcasses, but attention must be devoted to reducing slaughtering costs and toward market development.

Keywords: goat meat, goat meat wholesalers, goat meat demand, chevon, cabrito

FLORIDA AGRICULTURAL MARKET RESEARCH CENTER

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INTRODUCTION

On-going research at Florida A&M University over the past several decades has shown that goats can provide a profitable and sustainable source of income for small-scale farmers in Florida's rural communities. However, the Statewide Advisory Council, which represents goat producers throughout the state, identified development of an organized marketing infrastructure to distribute goat products from the "farm" to the consumer as one of its top priorities. Development of a more effective marketing infrastructure was identified as Objective 1 of the Five Year Plan of Work for the Statewide Goat Program for the 1999-2004 period.

This study contributes to developing a more efficient infrastructure by identifying elements in the existing commercial marketing system that are effectively marketing goat products, and by discovering impediments to present marketing activities and possible solutions to current marketing problems. This research is needed because previous research that addressed these issues was conducted over 10 years ago (Degner and Locascio, 1988).

OBJECTIVES

The basic objective of this research is to improve the marketing of goat meat products to benefit Florida's goat producers. Specific objectives are to:

(1) Identify the current commercial distribution channels of goat meat products in Florida.

(2) Estimate the quantities of goat meat flowing through commercial market channels in Florida.

(3) Determine product forms and sources of goat meat flowing through commercial market channels.

(4) Identify product quality problems and other marketing problems, if any, that may adversely affect the Florida goat industry's market development efforts.

PROCEDURE

The <u>State Business Directory</u>: <u>Florida</u> (American Business Information, Inc., 1999) was used to identify meat wholesalers currently operating in the state of Florida. A random sample of 100 firms was contacted by telephone and firm managers were interviewed to determine the current availability of goat meat, usual sources and relative quantities obtained, preferred product forms, and typical distribution patterns by type of retail outlet and geographic area. The data were analyzed and findings are presented below.

FINDINGS

Availability of Goat Meat

The proportion of meat wholesalers selling goat meat in the state of Florida in 1999 is roughly 18 percent (Table 1), slightly higher than the 14.6 percent reported in the 1986 study. Those wholesalers that previously sold goat meat but had discontinued selling it amounted to only four percent in 1999 compared to seven percent in 1986. About three-fourths reported never having sold goat meat in both studies. In 1999, two percent reported selling goat meat to other wholesale suppliers. The 1999 survey found that those currently selling goat meat have done so for 12 years, on average.

Table 1. Proportion of meat wholesalers selling goat meat, 1986 sample, 1999 sample, and 1999 total estimates.

	1986 sample		1999 sample		1999 estimate[a]
	number	percent	number	percent	number
Currently selling goat[b]	24	14.6	18	18.0	42
Previously sold	12	7.3	4	4.0	9
Never sold	128	78.0	76	76.0	179
Sell goat meat to other suppliers	0	0.0	2	2.0	5
Total	164	100.0	100	100.0	236

[a]1999 total estimates are simply the sample percentages applied to the total number of meat wholesalers listed in The State Business Directory: Florida.
[b]The 1999 survey found that those currently selling goat meat have done so for an average of 12 years.

Wholesalers that had discontinued goat meat sales cited insufficient demand as the prevalent reason in both 1986 and 1999 (Table 2). Half did so in 1986 and two-thirds in 1999. Supply problems were also commonly cited in both studies but to a lesser extent in 1999. One-third of 1999 respondents said they usually do not carry goat meat, but they do fill special orders for it.

Table 2. Reasons cited for discontinuing goat meat sales.

	1986 sample		1999 sample		1999 estimate
	number	percent	number	percent	number
Insufficient demand	6	50.0	2	50.0	5
Supply problems	5	41.7	1	25.0	2
Cheaper substitutes	4	33.3	0	0.0	0
Product Form	1	8.3	0	0.0	0
Filled special orders only	0	0.0	1	25.0	2

Total	12	100.0	4	100.0	9

Reasons for never selling goat meat or for ceasing were cited by 1999 survey respondents and are reported in Table 3. Reasons include insufficient demand (72.5 percent), not their product line (18.8 percent), lack of interest (5 percent), and insufficient demand and lack of interest (2.5 percent). On average, these 80 firms, which have never sold goat meat, reported receiving less than one request for goat meat each month.

Table 3. Reasons for never selling goat meat, 1999 sample and 1999 total wholesaler estimate.

	1999 sample		1999 estimate
	number	percent	number
Insufficient demand	58	72.5	137
Wholesaler lacked interest	4	5.0	9
Insufficient demand & lack of interest	2	2.5	5
Not compatible with their product line	15	18.8	35
No response	1	1.3	2
Total never selling plus those who quit[a]	80	100.0	189

[a]On average, the 80 firms never selling goat meat reported less than one request for goat meat per month. About 83 percent reported never receiving requests for goat meat.

Product Form

The 1999 survey showed fewer different product forms than in 1986. None of the wholesalers reported handling live animals or processing efforts to dice, cube or split the carcasses. The three product forms reported were fresh carcasses, frozen carcasses and frozen primals.

The frozen carcass, averaging about 36 pounds, was the most common goat meat product handled by wholesalers in 1999, accounting for 85.9 percent of the total tonnage (Tables 4 and 5). Frozen primals were a distant second with about 12.8 percent, and fresh whole carcasses, third with only 1.3 percent of the total volume (Table 5). About 55 percent of wholesalers handled frozen carcasses only, and 16 percent handled frozen primals only. Wholesalers handling some combination of fresh whole and frozen whole carcasses comprised 12 percent of those handling goat products and wholesalers handling a combination of frozen primals and frozen carcasses made up another 12 percent. Only five percent reported handling fresh carcasses exclusively (Table 4).

Table 4. Product forms handled by full-time goat wholesalers.

Type of carcass handled	Number	Percent
Frozen carcasses only	23	54.8
Frozen primals only	7	16.7
Fresh whole & frozen carcasses	5	11.9

Frozen carc. & frozen primals	5	11.9
Fresh whole only	2	4.8
Total[a]	42	100.0

[a] Total percent does not sum to 100.0 due to rounding.

Wholesale Volume and Prices

In total, meat wholesalers in the state of Florida were estimated to handle 174,000 pounds of goat meat per week in 1999 (Table 5). The overall average cost per pound to the wholesaler was $1.19 and the average price received per pound was $1.49. In real terms (adjusted for inflation) prices paid and received for goat meat by Florida wholesalers has declined significantly since the previous UF study was conducted (Degner and Locascio, 1988). In 1986, meat wholesalers paid the equivalent of $1.43 per pound for all types of goat meat, verses $1.19 in 1999; this represents a decline of nearly 17 percent. As for prices received, wholesalers got approximately $1.64 per pound in 1986 compared to $1.49 in 1999, a 9.2 percent decrease. Fresh carcasses account for only 1.3 percent of tonnage, but represent about 2.7 percent of weekly goat meat dollar sales. At a cost of $2.29 per pound to the wholesaler and a resulting $3.12 per pound wholesalers' customers, the fresh carcass market may be Florida producers' best opportunity. It appears unlikely that Florida can produce, slaughter, freeze and transport goat carcasses or primals for the $1.16 - $1.18 prices reported for frozen primals and carcasses. Wholesalers received $1.48 per pound of frozen carcass, on average and $1.40 per pound for frozen primals (Table 5).

Table 5. Pounds, cost per pound, total cost, average price received, and total dollar sales, by product form.

Type	Lbs./wk	Avg. cost/lb.	Total cost	Price rec'd per lb.	Total sales
		(- Dollars	-)		
Fresh carcass	2,240	2.29	5,130	3.12	6,989
Frozen carcass	149,800	1.18	176,764	1.48	221,704
Frozen primals	22,365	1.16	25,943	1.40	31,311
Total	174,405	1.19	207,837	1.49	260,004

Origin of Supply

On a total volume basis, more than 99 percent of goat meat received by Florida meat wholesalers in 1999 was from out-of-state (Table 6). In 1986, this number was reported at about 95 percent. In 1999, about 60 percent was obtained from Australia and one-third from New Zealand. Texas was the primary source of domestic goat meat, contributing about seven percent of Florida's supply. Frozen primals are exclusively shipped from Australia and New Zealand. Fresh whole carcasses, while small in volume, are about evenly split from Florida, Texas and

Chicago sources. The relatively small quantity of fresh carcasses obtained from "Chicago" may actually originate in Australia, although this could not be verified. Florida accounted for less than one percent of total weekly goat meat volume, but about one-third of the whole fresh carcasses handled (Table 6).

Table 6. Wholesale sources of various product forms of goat meat, estimated from the 1999 survey.

Product form/Sources	Pounds per week	Percent
Whole fresh carcasses		
Florida	782	34.9
Chicago	758	33.8
Texas	700	31.3
Total	2,240	100.0
Frozen carcasses		
Australia	91,254	60.9
New Zealand	57,248	38.2
Texas	1,050	0.7
Florida	248	0.2
Total	149,800	100.0
Frozen primals		
Australia	12,448	55.7
Texas	9,917	44.3
Total	22,365	100.0
All forms		
Australia	103,702	59.5
New Zealand	57,248	32.8
Texas	11,667	6.7
Florida	1,030	0.6
Chicago	758	0.4
Total	174,405	100.0

Distribution Channels

The 1999 survey showed approximately 76 percent of the goat meat volume reported by the Florida firms in this study was shipped out of state (Table 7). Frozen carcasses and frozen primals shipped out of Florida accounted for 76 percent and 82 percent of total frozen carcass and frozen primal volume, respectively. Fresh carcasses were never reportedly shipped out. Table 8 shows the weekly distribution of wholesale goat meat estimated for the state of Florida.

Table 7. Distribution of weekly wholesale goat meat in Florida and shipment out of Florida, by carcass type, for the study sample.

Carcass type	Total pounds sold	Pounds sold in Florida	Percent sold in Florida	Pound sold outside Florida	Percent sold outside Florida
Fresh carcasses	960	960	100.0	0	0.0
Frozen carcasses	64,200	15,563	24.2	48,637	75.8
Frozen primals	9,585	1,735	18.1	7,850	81.9

Total	74,745	18,258	24.4	56,487	75.6

Table 8. Distribution of weekly wholesale goat meat in Florida and shipment out of Florida, by carcass type, estimated for the state of Florida.

Carcass type	Total pounds sold	Pounds sold in Florida	Percent sold in Florida	Pounds sold outside Florida	Percent sold outside Florida
Fresh carcasses	2,240	2,240	100.0	0	0.0
Frozen carcasses	149,800	36,314	24.0	113,486	75.8
Frozen primals	22,365	4,048	18.0	18,317	81.9
Total	174,405	42,602	24.4	131,803	75.6

The 24 percent of total goat meat product that remained in Florida went largely to food retailers in the form of frozen carcasses (Table 9). About 52 percent was sold to independent food retailers and 12.5 percent to chain store retailers. Ethnic restaurants accounted for about 25 percent, barbecue restaurants 1.2 percent, and "white tablecloth" restaurants accounted for less than one percent. The remaining nine percent was purchased by individuals.

Table 9. Estimated wholesale shipments of goat meat to retail establishments in the State of Florida, 1999.

	Fresh carcasses pounds	Frozen carcasses pounds	Frozen Primals pounds	Total pounds	Total percent
Food Retailers					
Chain	0	4,779	445	5,224	12.5
Independents	630	20,482	445	21,557	51.7
Total	630	25,261	890	26,781	
Restaurants					
BBQ	0	490	0	490	1.2
White tablecloth	0	929	0	292	0.7
Ethnic	1,412	8,318	658	10,388	24.9
Total	1,412	9,100	658	11,170	
Individuals	198	1,951	1,622	3,771	9.0
Total	2,240	36,312	3,170	41,722	100.0

Distribution of goat meat by product form to retail outlets in the state of Florida is depicted in Figures 1-3. Fresh goat carcasses are largely in demand by ethnic restaurants. On a weekly basis, 63 percent of fresh goat carcasses go to ethnic restaurants, 28 percent to independent retailers and nine percent to individuals. Frozen goat primals go to individuals (40 percent), ethnic restaurants (38 percent), retail food chains (11 percent) and independent food retailers (11 percent). Whole frozen carcasses are purchased by independent food retailers (57 percent), ethnic restaurants (23 percent), retail food chains (13 percent), individuals (5 percent), and the remaining 2 percent is split between white tablecloth restaurants and BBQ restaurants.

Figure 1. Distribution of fresh goat carcasses to retail outlets in Florida.

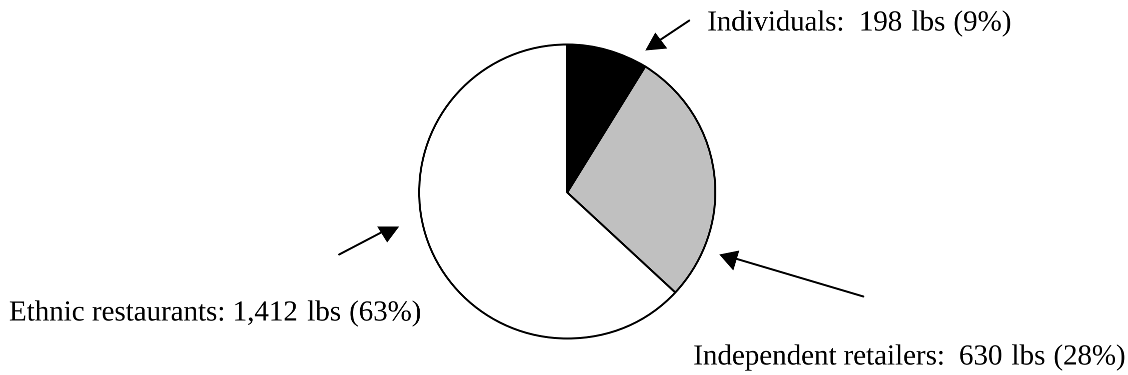


Figure 2. Distribution of frozen goat primals to retail outlets in Florida.

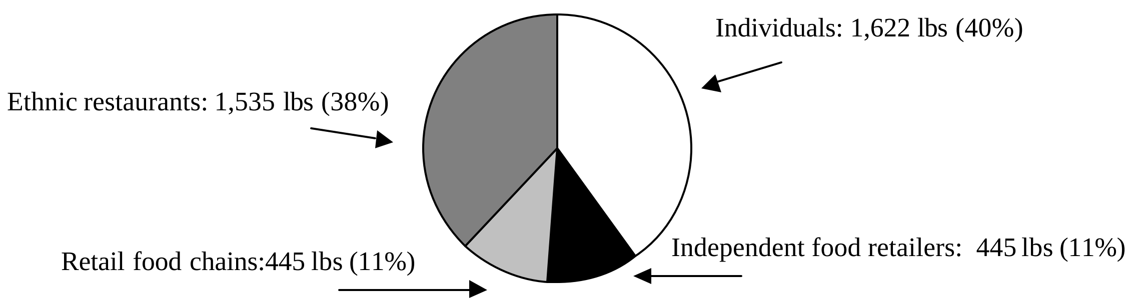
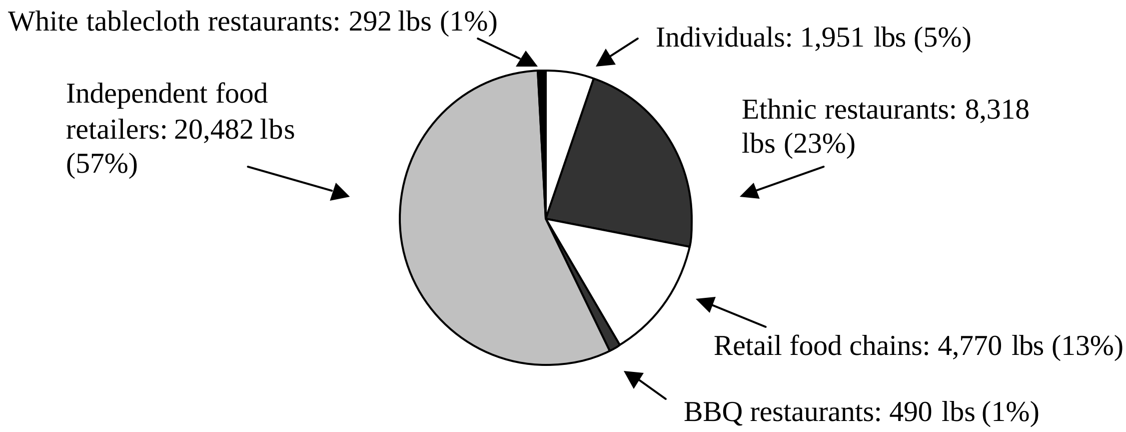


Figure 3. Distribution of frozen goat carcasses to retail outlets in Florida.



Supply and Marketing Problems

Firms currently selling goat meat were questioned about supply and marketing problems in both the 1986 and the 1999 surveys. There were no complaints about goat meat availability in 1999 and very few complaints about quality. Several respondents felt that mutton was frequently passed off as goat, and one said that goat carcasses that he had bought were "greasy." One complained that imported goat meat was too dark, not like "light" domestic goat. All were able to obtain adequate supplies. In 1986, about half of the respondents indicated problems with limited supplies.

Summary of 1986 Study Results Compared to 1999

The two survey efforts showed that the number of wholesalers handling goat products increased slightly, from 15 percent to 18 percent during the thirteen year span of time, and the average weight of a goat carcass remained constant at about 36 pounds (Table 10). Product forms handled changed more dramatically. In 1986, roughly seven percent of goat meat handled by wholesalers was in the form of fresh whole carcasses. This number dropped to about one percent of total goat meat volume in 1999. The total volume of frozen primals handled by wholesalers dropped from 57 percent to 13 percent. Whole frozen carcasses, however, rose from 41 percent of total goat meat volume to 86 percent. In constant 1999 dollars, both the cost of frozen carcass and the price received dropped. Estimates for the 1986 study area showed annual goat meat consumption at 0.26 pounds per capita. In 1999, estimates for the study area, which included all counties south of and including Pinellas, Hillsborough, Polk, Osceola, and Brevard plus Marion County, showed per capita goat meat consumption at 0.21 pounds. Thus per capita consumption may have declined slightly, even though total consumption in the state has increased because of population growth.

Table 10. Comparison of 1986 vs. 1999 goat marketing studies (South FL & Marion County).

	Study Year	
	1986[a]	1999
1. Wholesalers handling goat products	15%	18%
2. Average carcass weight	36.4 lbs.	36.2 lbs.
3. Wholesalers handling fresh whole carcasses	7%	1%
4. Wholesalers handling frozen carcasses	41%	86%
5.Wholesalers handling frozen primals	57%	13%
6. Wholesale frozen carcass cost	$1.43	$1.19
7. Wholesale frozen carcass price received	$1.64	$1.49
8. Per capita consumption	0.26 lbs.	0.21 lbs.
9. Percent of total goat meat sold fresh	5%	1%

[a]Prices reported in 1986 have been converted to constant 1999 dollars.

CONCLUSIONS AND RECOMMENDATIONS

Compared to the 1986 study, slightly more wholesalers are now selling goat. However, most meat wholesalers do not handle goat and cite lack of demand as the primary reason. Independent retailers and ethnic restaurants account for most sales.

Total wholesale goat meat sales to retail establishments and individuals in Florida are estimated at more than 2 million pounds in 1999 compared to 842,500 pounds in 1986. However, on a per capita basis, consumption is down by nearly 20 percent to 0.21 pounds. Given the average carcass weight of 36.2 pounds reported by firms interviewed, the commercial market in Florida requires less than 60,000 head of goats per year. Even if the non-commercial, direct-to-consumer sales are substantially larger than those of the commercial market, it is doubtful whether per capita consumption amounts to one pound per capita per year. In contrast, 1998 per capita consumption figures for beef, pork, chicken, fish and turkey were 97.0, 67.4, 84.9, 14.5 and 18.0 pounds, respectively (Table 11). Per capita consumption of lamb and mutton amounted to little more than a pound per capita.

Table 11. U.S. per capita consumption of selected meat items, 1986 and 1998.

Type of Meat	Per capita consumption 1986	Per capita consumption 1998	Percent change
	pounds[a]	pounds[a]	
Beef	107.8	97.0	-10.0
Pork	62.3	67.4	8.2
Chicken	58.1	84.9	46.1
Fish	15.4	14.5	-5.8
Turkey	12.9	18.0	39.5
Lamb/Mutton	1.6	1.3	-18.8
Goat	0.26[b]	0.21[b]	-19.2

[a]Carcass weight.

[b]Per capita goat meat consumption in 1986 is based on the three market study area, for 1998, the estimate is based on the South Florida counties and Marion County, Florida.

Source: USDA/Economic Research Service.

Based upon the total number of firms selling goat meat in both the 1986 and the 1999 study, it is obvious that distribution of goat meat remains limited. Further, when analyzing the total quantity of goat meat handled, it is clear that consumption is small, even among ethnic populations.

Given the very low, depressed wholesale prices for frozen carcasses and primals, it is not economically feasible for Florida goat producers to compete in this product market. For example, assuming a dress-out percentage of 50 percent and kill costs of $15 per head for an 80 pound live animal, a wholesale price of $1.18 per pound carcass weight results in a live animal value of only 40 cents per pound. In some cases, small-scale slaughtering plants' kill costs may be much more, perhaps as much as $25 per head (63 cents per carcass pound) resulting in a live weight value of only 28 cents per pound. It should be noted that this rough example ignores packaging and transportation costs, and the impending costs of USDA's HACCP regulations that are likely to increase operating costs for most slaughtering plants.

Analyses of fresh carcass prices reveal a somewhat more favorable scenario for Florida goat producers. Using the same example above, but substituting a fresh carcass wholesale value of $2.29 per pound results in live animal value of 96 cents per pound at the lower kill costs and 83 cents per pound at the higher kill cost. Again, packaging costs and transportation from slaughterhouse to wholesaler have been ignored. Another consideration is the relatively small size of the fresh carcass market. While there are some restaurants and independent grocers that prefer fresh, the cheaper frozen carcasses pose a formidable competitive threat. Market development and expansion for fresh carcass sales may require intense promotional efforts, reduced prices, or both.

A final recommendation is to foster increased opportunities for live animal sales. While some producers reportedly receive a dollar per pound on the hoof on the farm, additional opportunities may be limited unless producers actively promote sales by raising public awareness through various types of advertising, such as traditional mass media and the rapidly growing internet. Another possibility might be to join with other producers to sponsor "critter sales" in conjunction with large flea markets and other kinds of public markets. Cooperative efforts among producers could help keep marketing costs relatively low.

In conclusion, Florida goat producers must constantly strive to keep production and slaughtering costs low, and to promote the merits of <u>fresh</u> meat as being superior to frozen product. The "fresh" market offers Florida producers the greatest comparative advantage in today's market place.

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