

DEPARTMENT OF FOOD AND AGRICULTURE

Division of Measurement Standards
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A.G. KAWAMURA, Secretary



DMS Notice
QC – 07 – 1

May 14, 2007

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TO WEIGHTS AND MEASURES OFFICIALS

SUBJECT: Statewide Meat Counter Survey and Comparison with the National Survey

A statewide survey of establishments selling prepackaged meat, fish, and poultry was completed in October 2006.

The results reveal an average overfill of 1.39 % for meat and 0.43% for poultry with an overall average overfill in the State of 1.22 %. The last statewide survey, conducted in 1999, had an overall average overfill of 2.03%. This indicates a probable increase in the number of lots likely to be short of the labeled content compared to the 1999 survey. Generally, packers in California target their fill to a greater amount than the labeled weight to account for variables such as weight loss and weighing errors. The trend in stores has been to purchase and display more packaged meats and poultry processed and labeled by separate packaging plants as opposed to the packed-in-store product. For this reason our analysis includes the result for both types of labeling by selecting from all products displayed.

The survey results, by product category and comparison to the 1999 results, are enclosed. Also an estimate of annual program benefits to California meat and poultry consumers is included. The resources expended to verify compliance and to take actions when short-weight packages are encountered is minimal when compared to the program benefits. California officials expended about \$1 million of total state and county resources each year since the 1999 survey to inspect all types of packaged products, including hardware, building materials, food items, auto supplies, office supplies, hobby and entertainment goods, plastics, etc. This included meat and poultry products, where the benefits to California consumers exceeded \$240 million dollars.

A few months before this statewide survey, California participated in a separate national survey with other volunteer state jurisdictions. California does not include free or absorbed moisture in fresh meat and fresh poultry packages when determining the accuracy of the product net weights. However, because other states consider free and absorbed liquid in meat and poultry packages to be product, for consistency of results, California used this method for the national survey.

By comparing the recent California result to other state programs, the relative benefits of program efforts can be estimated. By considering total expenditures and the relative quantities received in different jurisdictions, an assumption can be made about the dollar value of the enforcement effort by assuming that if no effort was undertaken, the conditions in California would eventually be the same as other states with minimal or no verification programs. One state in the national survey, with little or no enforcement program, had an average error for packaged meats of + 0.04 % and - 0.68% for poultry. For comparison, we relied on all survey participants' average fill rather than this single jurisdiction with the lowest average fill. It is important to remember that other states consider free and absorbed liquid in meat and poultry packages to be product so the fact that the packages are short when the liquid is not included does not imply a violation of other state's laws. The California survey tables reflect just the true amount of meat or poultry in the package compared to the labeled weights.

If you have any questions regarding this notice, please contact your area Quantity Control Specialist or Ken Lake, Program Supervisor at (916) 229-3047.

Sincerely,

A handwritten signature in cursive script, appearing to read "Dennis R. Johannes".

Dennis R. Johannes
Director

Enclosures

cc: Ed Williams, Director, County Liaison Office
Steve Lyle, Director, Public Affairs

STATEWIDE MEAT COUNTER SURVEY

SCOPE OF SURVEY

Included in the survey were all establishments where prepackaged meat, fish, and poultry were packed, weighed, and labeled on the premises where sold. Items packaged and labeled elsewhere, but offered for sale at the store are also separately summarized.

SAMPLE SELECTION

Two hundred (200) establishments were selected at random from a statewide population of approximately 3500 establishments.

INSPECTION PROCEDURE

Twenty packages were randomly selected at each location. Packages of meat, fish, and poultry labeled at the location were recorded separately from samples that were packaged and labeled prior to being displayed at the store. Each package was opened to determine the actual net weight of the meat, fish, or poultry item and then compared to the labeled weight to determine any error for that package. In California moisture in or absorbed by the package is **not** included in the weight of fresh meat or poultry products.

SURVEY RESULTS

ITEMS LABELED IN-STORE (Wet Tare)

CATEGORY	1999		2006	
	SAMPLE SIZE	AVERAGE % OVERFILL	SAMPLE SIZE	AVERAGE % OVERFILL
Beef/Veal/Lamb	1,900	1.81	1308	1.54
Pork	837	1.64	704	1.12
Poultry	385	1.61	413	0.43
Seafood	566	3.90	422	1.18
Variety/Specialty	231	1.47	98	1.21
OVERALL	3,920	2.03	2945	1.22

Combining pork with beef, lamb, and veal there were 2012 samples with an average overfill of **1.39%**, which allows for direct comparison with the national survey of in-store labeled meat products.

The result for packages labeled before reaching the store, is summarized below.

ITEMS PACKAGED AND LABELED OTHER THAN BY THE STORE (Wet Tare)

CATEGORY	2006	
	SAMPLE SIZE	AVERAGE % OVERFILL
Beef/Veal/Lamb	118	0.61
Pork	206	1.21
Poultry	377	0.61
Seafood	77	1.69
Variety/Specialty	190	1.54
OVERALL	968	1.01

COMPARISON TO THE NATIONAL SURVEY

In the national survey, where fluids in, or absorbed by, the packaging materials were considered part of the product because of individual state and USDA policy, selected samples resulted in the following average fill levels.

NATIONAL SURVEY AVERAGE PACKAGED IN-STORE (Dry Tare)

Category	2006		
	Sample Size	Average % Overfill	Average % W/O Calif. data
Meat	2412	0.69	0.57 % (2295 packages)
Poultry	1369	0.48	0.21 % (1265 packages)

Though not used in the California survey, we also recorded the dry tare value for each package tested and the average per cent overfill was re-computed to determine the difference between the “wet tare” and “dry tare” results. The dry tare results allow direct comparison to the national average result and assist in estimating the value of the California programs. The average moisture in meat packages was 0.90 % and in poultry packages 2.56 %. To make a direct benefit comparison the average percent moisture in packaging was deducted from the product average percent fill recorded in other states and is shown as “Wet Tare (estimate)”.

NATIONAL SURVEY AVERAGE PACKAGED IN-STORE (W/O California)

Category	2006			
	Sample Size	Average % Overfill Dry Tare	Average % Moisture	Average % Overfill Wet Tare (estimate)*
Meat	2295	0.57	0.90	-0.33
Poultry	1265	0.21	2.56	-2.35

Lowest state average – inactive state program from national survey

Category	2006			
	Sample Size	Average % Overfill Dry Tare	Average % Moisture	Average % Overfill Wet Tare (estimate)*
Meat	118	0.04	0.90	-0.86
Poultry	118	-0.68	2.56	-3.24

* based upon average difference between wet and dry tare results of 2945 packages opened and tested in California

Statewide Annual Benefit for Packaged Fresh Meat and Poultry Products

Comparing California's average percent overfill of 1.39 for meat and 0.43 for poultry to the national average percent overfill of -0.33 for meat and -2.35 for poultry California's consumers receive 1.72 % more meat and 2.78 % more poultry in each package than consumers in the other participating states.

Based on annual sales of in-store packed fresh meats and fresh poultry, the dollar benefit of California's meat and poultry monitoring programs compared to a national average can be estimated.

Meat

0.0172 (\$ 9.7 billion annual in-store fresh meat sales) = **\$ 166 million** annual benefit
(estimated)

Poultry

0.0278 (\$ 2.9 billion annual in-store fresh poultry sales) = **\$ 81 million** annual benefit
(estimated)

Total Statewide Annual Benefit

(\$ 166 million + \$ 81 million) – Inspection costs of less than \$ 1 million = **\$ 246 million**

In this analysis, we have looked only at fresh meat and poultry packages where local efforts can be easily evaluated since the packages do not leave the state where they are packaged before being sold. The fact that a number of jurisdictions volunteered to participate made this comparison possible. The results are another illustration that verification programs and well defined standards benefit both the inhabitants and businesses in active jurisdictions. For products distributed in several or all states, active inspection programs have an even greater impact and ensure fair competition among foreign and domestic producers.

California counties are collectively among the most efficient agencies in the world when it comes to policing quantities and prices for accuracy. In addition to the higher levels of compliance that result from their programs, there are legal actions taken both administratively and in cooperation with county district attorneys. The district attorneys are able to levy appropriate penalties when widespread or serious violations are found to occur. These actions not only improve awareness by businesses of their responsibilities, but also help to off-set these relatively low net program costs.