PRELIMINARY REPORT FOR YIELD AND TIME DATA ON IBP USER FRIENDLY PRODUCTS

Andrew M. Martin, Carol L. Lorenzen, Davey B. Griffin, John P. Walter,

Jeff W. Savell, H. Kenneth Johnson and T.R. Dockerty

Texas A&M University

College Station, Texas 77843-2471

and

National Live Stock and Meat Board

Chicago, Illinois 60611

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TABLE OF CONTENTS

YIELD AND TIME DATA FOR IBP USER FRIENDLY PRODUCTS

This study evaluated the yield of beef retail cuts from IBP User Friendly primals and subprimals that differed in quality grade (Choice and Select). In addition, time-in-motion data were collected to assess the economic differences associated with labor. A simulated retail market fabrication room and two professional meat cutters from Texas State Technical College were used to conduct this study. The data collected will be incorporated into the CARDS program to provide additional information pertaining to closely-trimmed retail products.

The yield and time data are presented in the following tables. The multiple component products (2-piece round, 2-piece clod and 2-piece top sirloin) were fabricated as separate pieces and were therefore presented in separate tables. The reasoning for this procedure was that actual retail meat cutters would most likely fabricate similar pieces of a multiple component product as a group rather than one whole product at a time. Yield data presented in the tables are percentages based on an unbagged weight, so not all purge loss is accounted for. Time information is presented in seconds

The purpose of this research was to collect data that would be beneficial to retailers in the decision making process of whether or not closely trimmed primals and subprimals, such as the IBP User Friendly products, could be incorporated into their retail beef programs. The retailer must be educated concerning the economics of increased yields of saleable product and decreased labor associated with closely-trimmed products. These data should provide valuable information and insight on this subject.

PREDICTED MEAN PERCENTAGE VALUES FOR RETAIL CUTS FROM NECK-OFF CHUCK ROLL STRATIFIED BY QUALITY GRADE

		QUALITY GRADE	
UPC	ITEM	Choice	Select
1108	Eye Stk., Bnls.	8.65	9.58
1067	Blade Rst., Bnls.	84.06	83.40
1717	Beef Cubed Stk.	2.66	2.87
1652	Lean Trim	2.53	2.34
9000	Fat Trim	1.84	1.58
N/A	Cut Loss	0.26	0.23

PREDICTED MEAN VALUES FOR CUTTING TIMES (IN SECONDS) FROM NECK-OFF CHUCK ROLL STRATIFIED BY QUALITY GRADE

	QUALITY GRADE	
TIMES	Choice	Select
Box to Table	6.45	7.21
Cutting	30.29	33.85
Trim & Tray	19.15	20.69
Leaning-Out	35.77	27.93
Total Time	91.66	89.68

PREDICTED MEAN PERCENTAGE VALUES FOR RETAIL CUTS FROM TWO-PIECE CLOD (CLOD PORTION) STRATIFIED BY QUALITY GRADE

		QUALITY GRADE	
UPC	ITEM	Choice	Select
1050	Shoulder Stk., Bnls.	35.98	43.01
1049	Shoulder Pot Rst., Bnls.	47.01	42.80
1717	Beef Cubed Stk.	10.61	8.75
1652	Lean Trim	6.16	5.24
9000	Fat Trim	0.08	0.05
N/A	Cut Loss	0.16	0.15

PREDICTED MEAN VALUES FOR CUTTING TIMES (IN SECONDS) FROM TWO-PIECE CLOD (CLOD PORTION) STRATIFIED BY QUALITY GRADE

	QUALITY GRADE	
TIMES	Choice	Select
Table	2.93	7.34
Cutting	19.74	19.46
Trim & Tray	35.22	37.54
Total Time	57.89	64.34

PREDICTED MEAN PERCENTAGE VALUES FOR RETAIL CUTS FROM TWO-PIECE CLOD (TOP BLADE PORTION) STRATIFIED BY QUALITY GRADE

		QUALITY GRADE	
UPC	ITEM	Choice	Select
1084	Top Blade Stk., Bnls.	41.06	50.48
1080	Top Blade Pot Rst., Bnls.	54.55	45.07
1717	Beef Cubed Stk.	2.45	1.90
1652	Lean Trim	1.62	1.24
9000	Fat Trim	0.00	1.13
N/A	Cut Loss	0.32	0.18

PREDICTED MEAN VALUES FOR CUTTING TIMES (IN SECONDS) FROM TWO-PIECE CLOD (TOP BLADE PORTION) STRATIFIED BY QUALITY GRADE

	QUALITY GRADE	
TIMES	Choice	Select
Box to Table	4.17	6.37
Pre-Trim	0.00	3.85
Cutting	13.68	14.82
Trim & Tray	19.03	24.19
Total Time	36.88	49.23

PREDICTED MEAN PERCENTAGE VALUES FOR RETAIL CUTS FROM WHOLE CLOD STRATIFIED BY QUALITY GRADE

		QUALITY GRADE	
UPC	ITEM	Choice	Select
1084	Top Blade Stk., Bnls.	12.10	12.03
1080	Top Blade Pot Rst., Bnls.	12.45	12.85
1050	Shoulder Stk., Bnls.	32.22	30.02
1049	Shoulder Pot Rst., Bnls.	21.44	24.66
1717	Beef Cubed Stk.	8.39	8.06
1652	Lean Trim	8.37	7.43
9000	Fat Trim	0.92	0.73
1723	Beef Cubes, Sm.	4.00	4.00
N/A	Cut Loss	0.11	0.22

PREDICTED MEAN VALUES FOR CUTTING TIMES (IN SECONDS) FROM WHOLE CLOD STRATIFIED BY QUALITY GRADE

	QUALITY GRADE	
TIMES	Choice	Select
Box to Table	9.39	8.66
Pre-Trim	23.02	20.51
Cutting	76.93	61.97
Trim & Tray	98.89	68.59
Leaning-Out	178.75	145.63
Total Time	386.98	305.36

PREDICTED MEAN PERCENTAGE VALUES FOR RETAIL CUTS FROM CLEAN RIBEYE STRATIFIED BY QUALITY GRADE

		QUALITY GRADE	
UPC	ITEM	Choice	Select
1207	Ribeye Stk., Bnls.	98.93	98.55
1713	Beef for Stew	0.00	0.53
9000	Fat Trim	0.67	0.56
N/A	Cut Loss	0.40	0.36

PREDICTED MEAN VALUES FOR CUTTING TIMES (IN SECONDS) FROM CLEAN RIBEYE STRATIFIED BY QUALITY GRADE

	QUALITY GRADE	
TIMES	Choice	Select
Box to Table	7.65	7.29
Cutting	28.11	31.60
Trim & Tray	21.74	22.05
Total Time		

PREDICTED MEAN PERCENTAGE VALUES FOR RETAIL CUTS FROM 2" LIP-ON RIBEYE STRATIFIED BY QUALITY GRADE

		QUALITY GRADE	
UPC	ITEM	Choice	Select
1223	Ribeye Stk., Lip-On, Bnls.	88.78	86.41
1713	Beef for Stew	1.05	1.00
1652	Lean Trim	3.02	3.26
9000	Fat Trim	6.80	8.92
N/A	Cut Loss	0.35	0.41

PREDICTED MEAN VALUES FOR CUTTING TIMES (IN SECONDS) FROM 2" LIP-ON RIBEYE STRATIFIED BY QUALITY GRADE

	QUALITY GRADE	
TIMES	Choice	Select
Box to Table	8.87	7.49
Pre-Trim	23.88	23.51
Cutting	33.89	29.80
Trim & Tray	56.55	36.29
Leaning-Out	31.97	35.53
Total Time	155.16	132.62

PREDICTED MEAN PERCENTAGE VALUES FOR RETAIL CUTS FROM 0x1 SHORT LOIN STRATIFIED BY QUALITY GRADE

UPC	ITEM	QUALITY GRADE	
		Choice	Select
1316	Porterhouse Stk.	44.37	44.64
1330	T-Bone Stk.	31.60	32.87
1295	Top Loin Stk., Bnls.	8.86	8.57
1723	Beef Cubes, Small	1.54	0.71
1652	Lean Trim	3.76	3.69
9000	Fat Trim	2.18	2.29
9001	Bone	6.29	5.81
N/A	Cut Loss	1.40	1.42

PREDICTED MEAN VALUES FOR CUTTING TIMES (IN SECONDS) FROM 0x1 SHORT LOIN STRATIFIED BY QUALITY GRADE

TIMES	QUALITY GRADE	
	Choice	Select
Box to Table	10.94	11.81
Pre-Trim	10.89	12.49
Cutting	55.54	58.78
Trim & Tray	166.08	156.01
Total Time	243.47	239.09

PREDICTED MEAN PERCENTAGE VALUES FOR RETAIL CUTS FROM 0x1 BONELESS STRIPLOIN STRATIFIED BY QUALITY GRADE

		QUALITY GRADE	
UPC	ITEM	Choice	Select
1295	Top Loin Steak, Bnls.	87.27	87.78
1723	Beef Cubes, Small	1.80	2.27
1652	Lean Trim	3.25	4.02
9000	Fat Trim	7.45	5.79
N/A	Cut Loss	0.23	0.14

PREDICTED MEAN VALUES FOR CUTTING TIMES (IN SECONDS) FROM 0x1 BONELESS STRIPLOINS STRATIFIED BY QUALITY GRADE

	QUALITY GRADE	
TIMES	Choice	Select
Box to Table	8.54	7.76
Pre-Trim	17.31	20.55
Cutting	41.29	38.62
Trim & Tray	71.64	73.32
Total Time	138.78	140.25

PREDICTED MEAN PERCENTAGE VALUES FOR RETAIL CUTS FROM 1x1 BONE-IN STRIPLOIN STRATIFIED BY QUALITY GRADE

UPC	ITEM	QUALITY GRADE	
		Choice	Select
1289	Top Loin Stk., BI	90.00	89.38
1723	Beef Cubes, Small	2.01	3.28
1652	Lean Trim	1.72	1.85
9000	Fat Trim	3.31	2.65
9001	Bone	1.28	1.78
N/A	Cut Loss	1.68	1.06

PREDICTED MEAN VALUES FOR CUTTING TIMES (IN SECONDS) FROM 1x1 BONE-IN STRIPLOIN STRATIFIED BY QUALITY GRADE

TIMES	QUALITY GRADE	
	Choice	Select
Box to Table	13.43	11.07
Pre-Trim	17.98	8.38
Cutting	22.41	21.85
Trim & Tray	145.51	152.27
Total Time	199.33	193.57

PREDICTED MEAN PERCENTAGE VALUES FOR RETAIL CUTS FROM TWO-PIECE TOP SIRLOIN (DENUDED TOP BUTT PORTION) STRATIFIED BY QUALITY GRADE

		QUALITY GRADE	
UPC	ITEM	Choice	Select
1346	Top Sirloin Stk., Bnls.	83.57	83.55
1732	Cubes for Kabobs	8.99	10.24
1652	Lean Trim	5.19	5.63
9000	Fat Trim	2.13	0.46
N/A	Cut Loss	0.12	0.12

PREDICTED MEAN VALUES FOR CUTTING TIMES (IN SECONDS) FROM TWO-PIECE TOP SIRLOIN (DENUDED TOP BUTT PORTION) STRATIFIED BY QUALITY GRADE

	QUALITY GRADE	
TIMES	Choice	Select
Box to Table	7.56	8.39
Cutting	57.27	52.18
Trim & Tray	33.11	25.30
Leaning-Out	14.87	8.42
Total Time	112.81	94.29

PREDICTED MEAN PERCENTAGE VALUES FOR RETAIL CUTS FROM TWO-PIECE TOP SIRLOIN (CAP PORTION) STRATIFIED BY QUALITY GRADE

		QUALITY GRADE	
UPC	ITEM	Choice	Select
1346	Top Sirloin Stk., Bnls.	86.14	84.61
1732	Cubes for Kabobs	13.67	15.05
N/A	Cut Loss	0.19	0.34

PREDICTED MEAN VALUES FOR CUTTING TIMES (IN SECONDS) FROM TWO-PIECE TOP SIRLOIN (CAP PORTION) STRATIFIED BY QUALITY GRADE

	QUALITY GRADE	
TIMES	Choice	Select
Box to Table	5.96	6.64
Cutting	13.26	12.36
Trim & Tray	10.97	11.29
Total Time	30.19	30.29

PREDICTED MEAN PERCENTAGE VALUES FOR RETAIL CUTS FROM BONELESS TOP SIRLOIN STRATIFIED BY QUALITY GRADE

		QUALITY GRADE	
UPC	ITEM	Choice	Select
1346	Top Sirloin Stk., Bnls.	82.09	76.71
1379	Sirloin Cubes, Medium	7.90	9.46
1652	Lean Trim	6.79	6.14
9000	Fat Trim	3.02	7.54
N/A	Cut Loss	0.20	0.15

PREDICTED MEAN VALUES FOR CUTTING TIMES (IN SECONDS) FROM BONELESS TOP SIRLOIN STRATIFIED BY QUALITY GRADE

	QUALITY GRADE	
TIMES	Choice	Select
Box to Table	9.07	9.80
Cutting	69.73	74.86
Trim & Tray	106.08	118.41
Total Time	184.88	203.07

PREDICTED MEAN PERCENTAGE VALUES FOR RETAIL CUTS FROM PEELED BUTT TENDER STRATIFIED BY QUALITY GRADE

UPC	ITEM	QUALITY GRADE	
		Choice	Select
1384	Tenderloin Stk.	98.45	99.57
1652	Lean Trim	1.02	0.12
9000	Fat Trim	0.13	0.00
N/A	Cut Loss	0.40	0.31

PREDICTED MEAN VALUES FOR CUTTING TIMES (IN SECONDS) FROM PEELED BUTT TENDER STRATIFIED BY QUALITY GRADE

TIMES	QUALITY GRADE	
	Choice	Select
Box to Table	6.64	6.02
Cutting	4.86	5.37
Trim & Tray	6.23	6.35
Total Time	17.73	17.74

PREDICTED MEAN PERCENTAGE VALUES FOR RETAIL CUTS FROM PSMO TENDERLOIN STRATIFIED BY QUALITY GRADE

		QUALITY GRADE	
UPC	ITEM	Choice	Select
1384	Tenderloin Stk.	81.50	82.37
1388	Tenderloin Tips	2.06	0.86
1389	Tenderloin Rst., Pld.	16.33	16.61
N/A	Cut Loss	0.11	0.16

PREDICTED MEAN VALUES FOR CUTTING TIMES (IN SECONDS) FROM PSMO TENDERLOIN STRATIFIED BY QUALITY GRADE

	QUALITY GRADE	
TIMES	Choice	Select
Box to Table	8.60	8.68
Cutting	11.70	11.31
Trim & Tray	13.92	20.20
Total Time	34.22	40.19

PREDICTED MEAN PERCENTAGE VALUES FOR RETAIL CUTS FROM TWO-PIECE ROUND (KNUCKLE PORTION) STRATIFIED BY QUALITY GRADE

UPC	ITEM	QUALITY GRADE	
		Choice	Select
1510	Tip Rst.	55.34	50.18
1512	Tip Stk.	29.37	33.95
1528	Tip Cubes, Sm.	9.28	8.35
1652	Lean Trim	4.81	5.27
9000	Fat Trim	0.96	2.02
N/A	Cut Loss	0.24	0.23

PREDICTED MEAN VALUES FOR CUTTING TIMES (IN SECONDS) FROM TWO-PIECE ROUND (KNUCKLE PORTION) STRATIFIED BY QUALITY GRADE

TIMES	QUALITY GRADE	
	Choice	Select
Box to Table	7.37	6.62
Cutting	18.89	19.39
Trim & Tray	11.83	12.50
Leaning-Out	41.55	49.27
Total Time	79.64	87.78

PREDICTED MEAN PERCENTAGE VALUES FOR RETAIL CUTS FROM TWO-PIECE ROUND (ROUND PORTION) STRATIFIED BY QUALITY GRADE

		QUALITY GRADE	
UPC	ITEM	Choice	Select
1484	Rump Rst., Bnls.	10.07	10.66
1436	Round Stk.	62.37	61.64
1501	Eye of Round Stk.	4.49	4.60
1475	Top Round Rst.	10.24	10.94
1723	Beef Cubes, Sm.	2.70	2.94
1652	Lean Trim	4.63	4.31
9000	Fat Trim	5.03	4.43
N/A	Cut Loss	0.47	0.48

PREDICTED MEAN VALUES FOR CUTTING TIMES (IN SECONDS) FROM TWO-PIECE ROUND (ROUND PORTION) STRATIFIED BY QUALITY GRADE

	QUALITY GRADE	
TIMES	Choice	Select
Box to Table	12.05	11.79
Cutting	104.18	112.85
Trim & Tray	234.44	209.06
Leaning-Out	94.54	88.81
Total Time	445.16	422.51

PREDICTED MEAN PERCENTAGE VALUES FOR RETAIL CUTS FROM DENUDED EYE OF ROUND STRATIFIED BY QUALITY GRADE

UPC	ITEM	QUALITY GRADE	
		Choice	Select
1500	Eye of Round Rst.	63.86	64.63
1501	Eye of Round Stk.	31.27	32.03
9000	Fat Trim	4.63	3.14
N/A	Cut Loss	0.24	0.20

PREDICTED MEAN VALUES FOR CUTTING TIMES (IN SECONDS) FROM DENUDED EYE OF ROUND STRATIFIED BY QUALITY GRADE

TIMES	QUALITY GRADE	
	Choice	Select
Box to Table	6.45	8.38
Pre-Trim	14.79	7.64
Cutting	8.43	8.56
Trim & Tray	8.35	10.80
Total Time	38.02	35.38

PREDICTED MEAN PERCENTAGE VALUES FOR RETAIL CUTS FROM DENUDED ROUND FLAT STRATIFIED BY QUALITY GRADE

		QUALITY GRADE	
UPC	ITEM	Choice	Select
1487	Bottom Round Rst.	46.37	47.91
1488	Bottom Round Stk.	46.21	45.35
1456	Round Cubes, Sm.	0.27	0.48
1652	Lean Trim	2.57	1.77
9000	Fat Trim	4.41	4.08
N/A	Cut Loss	0.17	0.41

PREDICTED MEAN VALUES FOR CUTTING TIMES (IN SECONDS) FROM DENUDED ROUND FLAT STRATIFIED BY QUALITY GRADE

	QUALITY GRADE	
TIMES	Choice	Select
Box to Table	9.11	10.20
Pre-Trim	43.32	39.27
Cutting	27.77	21.05
Trim & Tray	30.69	28.16
Leaning-Out	15.39	12.89
Total Time	126.28	111.57

PREDICTED MEAN PERCENTAGE VALUES FOR RETAIL CUTS FROM DENUDED INSIDE ROUND STRATIFIED BY QUALITY GRADE

		QUALITY GRADE	
UPC	ITEM	Choice	Select
1475	Top Round Rst.	37.50	41.43
1464	Top Round Stk.	42.11	38.05
1473	Top Round Stk., Thick	16.58	15.71
1478	Top Round Cubes, Sm.	3.09	4.26
1652	Lean Trim	0.62	0.53
N/A	Cut Loss	0.10	0.02

PREDICTED MEAN VALUES FOR CUTTING TIMES (IN SECONDS) FROM DENUDED INSIDE ROUND STRATIFIED BY QUALITY GRADE

	QUALITY GRADE	
TIMES	Choice	Select
Box to Table	8.55	7.49
Cutting	28.60	29.32
Trim & Tray	22.35	25.63
Leaning-Out	4.58	6.01
Total Time	64.08	68.45

PREDICTED MEAN PERCENTAGE VALUES FOR RETAIL CUTS FROM PEELED KNUCKLE STRATIFIED BY QUALITY GRADE

UPC	ITEM	QUALITY GRADE	
		Choice	Select
1510	Tip Rst.	52.91	47.40
1512	Tip Stk.	30.97	29.61
1528	Tip Cubes, Sm.	8.68	12.28
1652	Lean Trim	5.83	8.37
9000	Fat Trim	1.30	2.11
N/A	Cut Loss	0.31	0.23

PREDICTED MEAN VALUES FOR CUTTING TIMES (IN SECONDS) FROM PEELED KNUCKLE STRATIFIED BY QUALITY GRADE

TIMES	QUALITY GRADE	
	Choice	Select
Box to Table	7.44	7.27
Cutting	15.04	14.45
Trim & Tray	9.05	8.67
Leaning-Out	53.74	71.60
Total Time	85.27	101.99