

APPENDIX A. Food Group Derived Variables (dietary recall level)

For information on NDSR Food Group Serving Count System and serving sizes see Appendix 10 of the NDSR 2011 Manual.

Table A. Food Group Derived Variables from 24hr Dietary Recalls

Food Group (Variable name)	Label	HCHS/SOL source variable name	Source Variable Description
FRUIT_CIT	Fruit – Citrus, servings/day	DTSA4 DTSA6	FRU0100 Citrus Juice FRU0300 Citrus Fruit
FRUIT_OTH	Fruit – Others, servings/day	DTSA5 DTSA7 DTSA8 DTSA9 DTSA10	FRU0200 Fruit Juice excluding Citrus Juice FRU0400 Fruit excluding Citrus Fruit FRU0500 Avocado and Similar FRU0600 Fried Fruits FRU0700 Fruit-based Savory Snack
FRUIT_ALL	Fruit – Others, servings/day	FRUIT_CIT FRUIT_OTH	Fruit – Citrus, servings/day Fruit – Others, servings/day
FRUIT_ALL_W OJUICE	Fruit – Overall, without fruit juice, servings/day	DTSA6 DTSA7 DTSA8	FRU0300 Citrus Fruit FRU0400 Fruit excluding Citrus Fruit FRU0500 Avocado and Similar
VEG_DARK	Vegetable – Dark-green, servings/day	DTSA11	VEG0100 Dark-green Vegetables
VEG_ORAN	Vegetable – Orange, servings/day	DTSA12	VEG0200 Deep-yellow Vegetables
VEG_TOMA	Vegetable – Tomato, servings/day	DTSA13	VEG0300 Tomato
VEG_WPOT	Vegetable – White Potatoes, servings/day	DTSA14	VEG0400 White Potatoes
VEG_STAR	Vegetable – Starchy, servings/day	DTSA15 DTSA16	VEG0800 Fried Potatoes VEG0450 Other Starchy Vegetables
VEG_BEAN	Vegetable – Beans, servings/day	DTSA17	VEG0700 Legumes (cooked dried beans)
VEG_OTH	Vegetable - Other, servings/day	DTSA18 DTSA19 DTSA20 DTSA164	VEG0600 Other Vegetables VEG0900 Fried Vegetables VEG0500 Vegetable Juice MSC0500 Pickled Foods
VEG_ALL	Vegetable – Overall, servings/day	VEG_DARK VEG_ORAN VEG_TOMA VEG_WPOT VEG_STAR	Vegetable – Dark-green, servings/day Vegetable – Orange, servings/day Vegetable – Tomato, servings/day Vegetable – White Potatoes, servings/day Vegetable – Starchy, servings/day

Food Group (Variable name)	Label	HCHS/SOL source variable name	Source Variable Description
		VEG_BEAN	Vegetable – Beans, servings/day
		VEG_OTH	Vegetable - Other, servings/day
VEG_ALL_WO POTATO	Vegetable – Overall, without potato , servings/day	DTSA11 DTSA12 DTSA13 DTSA16 DTSA18 DTSA20	VEG0100 Dark-green Vegetables VEG0200 Deep-yellow Vegetables VEG0300 Tomato VEG0450 Other Starchy Vegetables VEG0600 Other Vegetables VEG0500 Vegetable Juice
VEG_ALL_WO FPOTATO	Vegetable – Overall, without fried potato, servings/day	DTSA11 DTSA12 DTSA13 DTSA14 DTSA16 DTSA17 DTSA18 DTSA19 DTSA20 DTSA164	VEG0100 Dark-green Vegetables VEG0200 Deep-yellow Vegetables VEG0300 Tomato VEG0400 White Potatoes VEG0450 Other Starchy Vegetables VEG0700 Legumes (cooked dried beans) VEG0600 Other Vegetables VEG0900 Fried Vegetables VEG0500 Vegetable Juice MSC0500 Pickled Foods
FRUITVEG_W OFPOTATO	Fruit and vegetables without fried potato (servings/day)	FRUIT_ALL DTSA15 VEG_ALL	Fruit – Others, servings/day VEG0800 Fried Potatoes Vegetable – Overall, servings/day
GRAIN_REF	Grain – Refined Grain, servings/day	DTSA23 DTSA24 DTSA26 DTSA27 DTSA29 DTSA30 DTSA32 DTSA33 DTSA35 DTSA36 DTSA38 DTSA39 DTSA41 DTSA42 DTSA44 DTSA45 DTSA47	GRS0100 Grains, Flour and Dry Mixes - Some Whole Grain GRR0100 Grains, Flour and Dry Mixes - Refined Grain GRS0200 Loaf-type Bread and Plain Rolls - Some Whole Grain GRR0200 Loaf-type Bread and Plain Rolls - Refined Grain GRS0300 Other Breads (quick breads, corn muffins, tortillas) - Some Whole Grain GRR0300 Other Breads (quick breads, corn muffins, tortillas) - Refined Grain GRS0400 Crackers - Some Whole Grain GRR0400 Crackers - Refined Grain GRS0500 Pasta - Some Whole Grain GRR0500 Pasta - Refined Grain GRS0600 Ready-to-eat Cereal (not presweetened) - Some Whole Grain GRR0600 Ready-to-eat Cereal (not presweetened) - Refined Grain GRS0700 Ready-to-eat Cereal (presweetened) - Some Whole Grain GRR0700 Ready-to-eat Cereal (presweetened) - Refined Grain GRS0800 Cakes, Cookies, Pies, Pastries, Danish, Doughnuts and Cobblers - Some Whole Grain GRR0800 Cakes, Cookies, Pies, Pastries, Danish, Doughnuts and Cobblers - Refined Grain GRS1000 Snack Bars - Some Whole Grain

Food Group (Variable name)	Label	HCHS/SOL source variable name	Source Variable Description
		DTSA48 DTSA50 DTSA51 DTSA53 DTSA54	GRR1000 Snack Bars - Refined Grain GRS0900 Snack Chips - Some Whole Grain GRR0900 Snack Chips - Refined Grain GRW1200 Flavored Popcorn GRO0100 Baby Food Grain Mixtures
GRAIN_WHL	Grain – Whole Grain, servings/day	DTSA22 DTSA25 DTSA28 DTSA31 DTSA34 DTSA37 DTSA40 DTSA43 DTSA46 DTSA49 DTSA52	GRW0100 Grains, Flour and Dry Mixes - Whole Grain GRW0200 Loaf-type Bread and Plain Rolls - Whole Grain GRW0300 Other Breads (quick breads, corn muffins, tortillas) - Whole Grain GRW0400 Crackers - Whole Grain GRW0500 Pasta - Whole Grain GRW0600 Ready-to-eat Cereal (not presweetened) - Whole Grain GRW0700 Ready-to-eat Cereal (presweetened) - Whole Grain GRS0700 Ready-to-eat Cereal (presweetened) - Some Whole Grain GRW1000 Snack Bars - Whole Grain GRW0900 Snack Chips - Whole Grain GRW1100 Popcorn
GRAIN_ALL	Grain – Overall, servings/day	GRAIN_WHL GRAIN_REF	Grain – Whole Grain, servings/day Grain – Refined Grain, servings/day
MEAT_RED	Meat – Red Meat, servings/day	DTSA55 DTSA56 DTSA57 DTSA58 DTSA59 DTSA60 DTSA61 DTSA62 DTSA65	MRF0100 Beef MRL0100 Lean Beef MRF0200 Veal MRL0200 Lean Veal MRF0300 Lamb MRL0300 Lean Lamb MRF0400 Fresh Pork MRL0400 Lean Fresh Pork MRF0500 Game
MEAT_LUNCH	Meat – Luncheon, servings/day	DTSA63 DTSA64 DTSA74 DTSA75	MCF0200 Cured Pork MCL0200 Lean Cured Pork MCF0100 Cold Cuts and Sausage MCL0100 Lean Cold Cuts and Sausage
MEAT_POUL	Meat – Poultry, servings/day	DTSA66 DTSA67 DTSA68	MPF0100 Poultry MPL0100 Lean Poultry MPF0200 Fried Chicken - Commercial Entrée and Fast Food
MEAT_FISH	Meat – Fish, servings/day	DTSA69 DTSA70 DTSA71 DTSA72	MFF0100 Fish - Fresh and Smoked MFL0100 Lean Fish - Fresh and Smoked MFF0200 Fried Fish - Commercial Entrée and Fast Food MSL0100 Shellfish

Food Group (Variable name)	Label	HCHS/SOL source variable name	Source Variable Description
		DTSA73	MSF0100 Fried Shellfish - Commercial Entrée and Fast Food
MEAT_ORG	Meat – Organ Meats, servings/day	DTSA76	MOF0100 Organ Meats
MEAT_EGG	Meat – Eggs, servings/day	DTSA79 DTSA80	MOF0300 Eggs MOF0400 Egg Substitute
MEAT_NUT	Meat – Nuts, servings/day	DTSA81 DTSA82	MOF0500 Nuts and Seeds MOF0600 Nut and Seed Butters
MEAT_SOY	Meat – Soy, servings/day	DTSA83 DTSA117	MOF0700 Meat Alternatives DOT0800 Infant Formula - Nondairy
MEAT_ALL	Meat – Overall (servings/day)	MEAT_RED MEAT_LUNCH MEAT_POUL MEAT_FISH MEAT_ORG MEAT_EGG MEAT_NUT MEAT_SOY	Meat – Red Meat, servings/day Meat – Luncheon, servings/day Meat – Poultry, servings/day Meat – Fish, servings/day Meat – Organ Meats, servings/day Meat – Eggs, servings/day Meat – Nuts, servings/day Meat – Soy, servings/day
NUT_LEGUMES	Nut and Legumes, servings/day	DTSA17 DTSA81 DTSA82	VEG0700 Legumes (cooked dried beans) MOF0500 Nuts and Seeds MOF0600 Nut and Seed Butters
MILK_MILK	Milk – Milk, servings/day	DTSA84 DTSA85 DTSA86 DTSA87 DTSA88 DTSA89 DTSA90 DTSA91 DTSA92 DTSA93 DTSA94 DTSA114 DTSA115 DTSA116	DMF0100 Milk - Whole DMR0100 Milk - Reduced Fat DML0100 Milk - Low Fat and Fat Free DMN0100 Milk - Nondairy DMF0200 Ready-to-drink Flavored Milk - Whole DMR0200 Ready-to-drink Flavored Milk - Reduced Fat DML0200 Ready-to-drink Flavored Milk - Low Fat and Fat Free DML0300 Sweetened Flavored Milk Beverage Powder with Non-fat Dry Milk DML0400 Artificially Sweetened Flavored Milk Beverage Powder with Non-fat Dry Milk SWT0600 Sweetened Flavored Milk Beverage Powder without Non-fat Dry Milk MSC1100 Artificially Sweetened Flavored Milk Beverage Powder without Non-fat Dry Milk DOT0500 Dairy-based Sweetened Meal Replacement/Supplement DOT0600 Dairy-based Artificially Sweetened Meal Replacement/Supplement DOT0700 Infant Formula
MILK_CHES	Milk – Cheese, servings/day	DTSA95 DTSA96 DTSA97	DCF0100 Cheese - Full Fat DCR0100 Cheese - Reduced Fat DCL0100 Cheese - Low Fat and Fat Free

Food Group (Variable name)	Label	HCHS/SOL source variable name	Source Variable Description
		DTSA98	DCN0100 Cheese - Nondairy
MILK_YOGU	Milk – Yogurt, servings/day	DTSA99 DTSA100 DTSA101 DTSA102 DTSA103 DTSA104 DTSA105	DYF0100 Yogurt - Sweetened Whole Milk DYR0100 Yogurt - Sweetened Low Fat DYL0100 Yogurt - Sweetened Fat Free DYF0200 Yogurt - Artificially Sweetened Whole Milk DYR0200 Yogurt - Artificially Sweetened Low Fat DYL0200 Yogurt - Artificially Sweetened Fat Free DYN0100 Yogurt - Nondairy
MILK_DESR	Milk – Dessert, servings/day	DTSA106 DTSA108 DTSA109	DOT0100 Frozen Dairy Dessert DOT0300 Pudding and Other Dairy Dessert DOT0400 Artificially Sweetened Pudding and Other Dairy Dessert
MILK_ALL	Milk – Overall, servings/day	MILK_MILK MILK_CHES MILK_YOGU MILK_DESR	Milk – Milk, servings/day Milk – Cheese, servings/day Milk – Yogurt, servings/day Milk – Dessert, servings/day
FAT_DISC	Fat – Discretionary Fat, servings/day	DTSA110 DTSA111 DTSA112 DTSA113	FCF0100 Cream FCR0100 Cream - Reduced Fat FCL0100 Cream - Low Fat and Fat Free FCN0100 Cream - Nondairy
FAT_OIL	Fat – Oil, servings/day	DTSA118 DTSA119 DTSA120 DTSA121 DTSA122 DTSA123 DTSA124 DTSA125 DTSA160 DTSA161 DTSA162 DTSA163	FMF0100 Margarine - Regular FMR0100 Margarine - Reduced Fat FOF0100 Oil FSF0100 Shortening FAF0100 Butter and Other Animal Fats - Regular FAR0100 Butter and Other Animal Fats - Reduced Fat FDF0100 Salad Dressing - Regular FDR0100 Salad Dressing - Reduced Fat/Reduced Calorie/Fat Free MSC0100 Gravy - Regular MSC0200 Gravy - Reduced Fat/Fat Free MSC0300 Sauces and Condiments - Regular MSC0400 Sauces and Condiments - Reduced Fat
FAT_ALL	Fat – Overall, servings/day	FAT_DISC FAT_OIL	Fat – Discretionary Fat, servings/day Fat – Oil, servings/day
SUGAR_SGR	Sugar – Sugar, servings/day	DTSA126 DTSA127 DTSA128 DTSA129 DTSA130	SWT0400 Sugar MSC1200 Sugar Substitute SWT0500 Syrup, Honey, Jam, Jelly, Preserves SWT0700 Sauces, Sweet - Regular SWT0800 Sauces, Sweet - Reduced Fat/Reduced Calorie/Fat Free

Food Group (Variable name)	Label	HCHS/SOL source variable name	Source Variable Description
SUGAR_DESR	Sugar – Dessert, servings/day	DTSA131 DTSA132 DTSA133 DTSA165	SWT0100 Chocolate Candy SWT0200 Non-chocolate Candy SWT0300 Frosting or Glaze MSC0600 Miscellaneous Dessert
SUGAR_SWTB	Sugar – Sugar Sweetened Beverage, servings/day	DTSA134 DTSA137 DTSA139 DTSA142 DTSA145 DTSA148 DTSA151 DTSA154 DTSA155	BVS0400 Sweetened Soft Drinks BVS0300 Sweetened Fruit Drinks BVS0500 Sweetened Tea BVS0100 Sweetened Coffee BVS0200 Sweetened Coffee Substitutes BVS0600 Sweetened Water BVS0700 Nondairy-based Sweetened Meal Replacement/Supplement BVO0100 Non-alcoholic Beer BVO0200 Non-alcoholic Light Beer
SUGAR_SWTB_WJUICE	Sugar Sweetened Beverage, include fruit juice, servings/day	DTSA4 DTSA5 DTSA134 DTSA137 DTSA139 DTSA142 DTSA145 DTSA148 DTSA151 DTSA154 DTSA155	FRU0100 Citrus Juice FRU0200 Fruit Juice excluding Citrus Juice BVS0400 Sweetened Soft Drinks BVS0300 Sweetened Fruit Drinks BVS0500 Sweetened Tea BVS0100 Sweetened Coffee BVS0200 Sweetened Coffee Substitutes BVS0600 Sweetened Water BVS0700 Nondairy-based Sweetened Meal Replacement/Supplement BVO0100 Non-alcoholic Beer BVO0200 Non-alcoholic Light Beer
SUGAR_DIETB	Sugar – Diet Beverage, servings/day	DTSA135 DTSA136 DTSA138 DTSA140 DTSA141 DTSA143 DTSA144 DTSA146 DTSA147 DTSA149 DTSA152 DTSA153	BVA0400 Artificially Sweetened Soft Drinks BVU0300 Unsweetened Soft Drinks BVA0300 Artificially Sweetened Fruit Drinks BVA0500 Artificially Sweetened Tea BVU0400 Unsweetened Tea BVA0100 Artificially Sweetened Coffee BVU0100 Unsweetened Coffee BVA0200 Artificially Sweetened Coffee Substitutes BVU0200 Unsweetened Coffee Substitutes BVA0600 Artificially Sweetened Water BVA0700 Nondairy-based Artificially Sweetened Meal Replacement/Supplement BVU0600 Nondairy-based Unsweetened Meal Replacement/Supplement
SUGAR_ALL	Sugar – Overall, servings/day	SUGAR_SGR SUGAR_DESR	Sugar – Sugar, servings/day Sugar – Dessert, servings/day

Food Group (Variable name)	Label	HCHS/SOL source variable name	Source Variable Description
		SUGAR_SWTB	Sugar – Sugar Sweetened Beverage, servings/day
		SUGAR_DIETB	Sugar – Diet Beverage, servings/day
WATER	Water, servings/day	DTSA150	BVU0500 Unsweetened Water
ALCOHOL	Alcohol, servings/day	DTSA156	BVE0100 Beer and Ale
		DTSA157	BVE0400 Cordial and Liqueur
		DTSA158	BVE0300 Distilled Liquor
		DTSA159	BVE0200 Wine
SNACK_SWT	Snack – Sweet Snack, servings/day	DTSA43	GRW0800 Cakes, Cookies, Pies, Pastries, Danish, Doughnuts and Cobblers - Whole Grain
		DTSA44	GRS0800 Cakes, Cookies, Pies, Pastries, Danish, Doughnuts and Cobblers - Some Whole Grain
		DTSA45	GRR0800 Cakes, Cookies, Pies, Pastries, Danish, Doughnuts and Cobblers - Refined Grain
		DTSA46	GRW1000 Snack Bars - Whole Grain
		DTSA47	GRS1000 Snack Bars - Some Whole Grain
		DTSA48	GRR1000 Snack Bars - Refined Grain
SNACK_SALT	Snack – Salty Snack, servings/day	DTSA49	GRW0900 Snack Chips - Whole Grain
		DTSA50	GRS0900 Snack Chips - Some Whole Grain
		DTSA51	GRR0900 Snack Chips - Refined Grain
		DTSA52	GRW1100 Popcorn
		DTSA53	GRW1200 Flavored Popcorn
SNACK_NUT	Snack – Nuts, servings/day	DTSA81	MOF0500 Nuts and Seeds
		DTSA82	MOF0600 Nut and Seed Butters
SNACK_CRACK	Snack – Cracker, servings/day	DTSA31	GRW0400 Crackers - Whole Grain
		DTSA32	GRS0400 Crackers - Some Whole Grain
		DTSA33	GRR0400 Crackers - Refined Grain
SNACK_VEGFR	Snack – Fruit or Vegetable Savory(servings/day)	DTSA10	FRU0700 Fruit-based Savory Snack
		DTSA21	FMC0100 Vegetable-based Savory Snack
SNACK_ALL	Snack – Overall, servings/day	SNACK_SWT	Snack – Sweet Snack, servings/day
		SNACK_SALT	Snack – Salty Snack, servings/day
		SNACK_NUT	Snack – Nuts, servings/day
		SNACK_CRACK	Snack – Cracker, servings/day
		SNACK_VEGFR	Snack – Fruit or Vegetable Savory(servings/day)