

## About Food and Beverage Thickening Agents

The following chart is intended to help you understand the differences between the types of thickening agents you can buy. Information is also included for pre-thickened products. Thickeners are not necessarily interchangeable. Before you change any current product you are using be sure to discuss options with your speech language pathologist, doctor, dietitian or other health care provider that is assisting you with your dysphagia management.

	<b>Starch-based Powders</b>	<b>Gum-based Powders</b>	<b>Gel Thickener</b>	<b>Pre-Thickened Beverages</b>	<b>Pre-Thickened Powder Drink Mixes</b>
<b>Thickening Ingredient</b>	<b>Maltodextrin (Corn)</b>	<b>Xanthan or Cellulose Gum with Maltodextrin</b>	<b>Xanthan Gum</b>	<b>May be a starch or gum</b>	<b>Maltodextrin (Corn)</b>
<b>Use</b>	Powder thickeners can be mixed with any beverage to the desired consistency. Powder thickeners will be slightly more difficult to use in carbonated, alcoholic and high protein shake / supplement beverages.	Powder thickeners can be mixed with any beverage to the desired consistency. Powder thickeners will be slightly more difficult to use in carbonated, alcoholic and high protein shake / supplement beverages.	Liquid thickeners can be mixed with any beverage to the desired consistency.	Convenience. Pre-thickened beverages are available in the 'popular' options such as water, milk, juices and juice drink beverages.	Convenience, just add hot water as directed. Pre-thickened drink mixes are available in the 'popular' options such decaffeinated coffee and tea
<b>Can I thicken both hot and cold beverages?</b>	Yes, although thickening hot drinks is not always easy.	Yes, gum powders work well in hot drinks.	Yes, liquid thickeners work well in hot drinks.	It is not recommended to heat pre-thickened drinks as heating may interfere with the consistency.	If mixed properly, these hot beverages hold their consistency as they cool.
<b>Can I thicken carbonated drinks?</b>	Starch-based thickeners do not work as well in carbonated drinks. They foam up when stirred in and the beverage tends to lose its carbonation.	Yes, gum powders work well in carbonated drinks.	Yes, the gel liquid works well in carbonated drinks.		
<b>Appearance</b>	Clear beverages will appear cloudy and have a slightly grainy texture.	Clear beverages remain clear and have a smooth, slightly slippery texture.	Clear beverages remain clear and have a smooth, slightly slippery texture.	All pre-thickened will be smooth in texture. Clarity will correlate to the type of thickener used.	Clear beverages will appear cloudy and have a slightly grainy texture.
<b>Ease of Use</b>	Require measuring and immediate mixing to avoid lumping. Powders can lump if not thoroughly mixed in.	Require measuring and immediate vigorous mixing to get them into solution. Powders can lump if not thoroughly mixed in.	Gel liquid thickeners require measuring and vigorous mixing to get them into solution. Liquid thickeners will not lump but if not mixed in adequately the consistency will not be smooth and cohesive.	No mixing required. May be consumed chilled or at room temperature	Require measuring of the hot liquid and immediate mixing to avoid lumping. Follow manufacturers temperature recommendation. Powders can lump if not thoroughly mixed in.

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<b>Thickening Ingredient</b>	<b>Maltodextrin (Corn)</b>	<b>Xanthan or Cellulose Gum with Maltodextrin</b>	<b>Xanthan Gum</b>	<b>May be a starch or gum</b>	<b>Maltodextrin (Corn)</b>
<b>Time to thicken</b>	Require from 1 to 3 minutes to reach consistency.	Require from 3-5 minutes to reach consistency.	Requires no waiting time to reach consistency.	Pre-thickened drinks are at the labeled consistency right out of the package whether chilled or at room temperature. The consistency will appear slightly thicker when chilled.	Pre-thickened drinks are at the labeled consistency right out of the package whether chilled or at room temperature. The consistency will appear slightly thicker when chilled.
<b>Thickening over time</b>	Starch-based powder thickeners may thicken over time, especially the liquid and powder are not measured initially.	Gum-based powder thickeners will hold their initial consistency over time.	Gel thickeners will hold the initial consistency over time.	Pre-thickened drinks will not change consistency but they will be slightly thicker when chilled vs. at room temperature. Pre-thickened beverages are designed to be the consistency as labeled regardless of serving temperature	Pre-thickened drink mixes may thicken over time if the liquid was not measured properly.
<b>Can I thicken foods?</b>	Yes. Most manufacturers will have recipes for using the starch powder thickeners in foods. See also <a href="#">Recipes</a> available on Dysphagia-Diet.com	Yes. Most manufacturers will have recipes for using the gum powder thickeners in foods. See also <a href="#">Recipes</a> available on Dysphagia-Diet.com Gums do not thicken as "stiff" as starch thickeners. If you want to mold foods or have them old shape we suggest using the starch thickeners.	Yes. The manufacturer will have recipes for using the gel thickener in foods. See also <a href="#">Recipes</a> available on Dysphagia-Diet.com Gums do not thicken as "stiff" as starch thickeners. If you want to mold foods or have them old shape we suggest using the starch thickeners.		
<b>Packaging Options^</b>	Resealable multi-serving canister Individual serving packet	Resealable multi-serving canister Individual serving packet	Recloseable multi-serving bottle Individual serving packet	Recloseable multi-serving container Individual 8 fl oz, select items may be recloseable Individual 4 fl oz	Individual serving packet by either honey-like or nectar-like consistency.

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<b>Cost<sup>^</sup></b>	Starch thickeners will tend to be the least expensive because they are the most basic form of thickening agent.	Gum powder thickeners will be more expensive than starch thickeners because they are a newer type of thickening agent and the ingredient is more costly.	Liquid thickeners are a step up in convenience so they will be more expensive than powders but less than pre-thickened.	Pre-thickened beverages will be the most expensive because they offer the highest level of convenience.	Pre-thickened drink mixes will be the more expensive than thickening your own drink due to the added convenience of beverage and thickener already measured.
<sup>^</sup> See also the <a href="#">Thickener Purchasing Guide</a> for packaging choices and servings per pack or case to help you determine the most cost-effective option that fits your specific need.					
<b>Shelf Life</b>	24-36 months unopened	24-36 months unopened	12-24 months unopened	9-12 months unopened	24-36 months unopened
<b>Are these products okay for people with diabetes?</b>	Yes, most powder thickeners will add approximately 1/2 of a carbohydrate exchange to the food/drink.	Yes, powder gum thickeners will not contribute any meaningful amount of carbohydrate to the food/drink.	Yes, liquid thickeners will not contribute any meaningful amount of carbohydrates to the food/drink.	Yes, but check the nutrition facts panel on the package for the amount of carbohydrate grams in the product.	Yes, but check the nutrition facts panel on the package for the amount of carbohydrate grams in the product.
<b>Are these products gluten-free?</b>	Usually they are; check the label to be certain.	Usually they are; check the label to be certain.	Usually they are; check the label to be certain.	Usually they are; check the label to be certain.	Usually they are; check the label to be certain.
<b>Are these products lactose-free?</b>	Usually they are; check the label to be certain.	Usually they are; check the label to be certain.	Usually they are; check the label to be certain.	Usually they are, unless it is a thickened milk or supplement, check the label to be certain.	Usually they are; check the label to be certain.
<b>Are these products kosher?</b>	Usually they are; check the label to be certain.	Usually they are; check the label to be certain.	Usually they are; check the label to be certain.	Usually they are; check the label to be certain.	Usually they are; check the label to be certain.