Membership Fees

	2021	2020	2019
Membership fees	\$ 3,877	\$ 3,541	\$ 3,352
Membership fees increase	9 %	6 %	7 %

Membership fees increased 9% in 2021, driven by sign-ups and upgrades to Executive membership. Excluding the positive impact of changes in foreign currencies relative to the U.S. dollar, membership fees increased 8%. At the end of 2021, our member renewal rates were 91% in the U.S. and Canada and 89% worldwide. Our renewal rate is a trailing calculation that captures renewals during the period seven to eighteen months prior to the reporting date. We account for membership fee revenue on a deferred basis, recognized ratably over the one-year membership period.

Gross Margin

	2021	 2020	 2019
Net sales	\$ 192,052	\$ 163,220	\$ 149,351
Less merchandise costs	170,684	144,939	132,886
Gross margin	\$ 21,368	\$ 18,281	\$ 16,465
Gross margin percentage	11.13 %	11.20 %	11.02 %

The gross margin of our core merchandise categories (foods and sundries, non-foods and fresh foods), when expressed as a percentage of core merchandise sales (rather than total net sales), increased 23 basis points. This measure eliminates the impact of changes in sales penetration and gross margins from our warehouse ancillary and other businesses. The increase was across all categories, most significantly in non-foods.

Total gross margin percentage decreased seven basis points compared to 2020. Excluding the impact of gasoline price inflation on net sales in 2021, gross margin percentage was 11.22%, an increase of two basis points. This increase was due to a two basis point improvement in our core merchandise categories, predominantly non-foods, and in our warehouse ancillary and other businesses, largely e-commerce. The comparison was also positively impacted by a three basis point reserve on inventory recorded in 2020 with no such reserve this year. Gross margin percentage was negatively impacted three basis points due to increased 2% rewards and two basis points due to a LIFO charge for higher merchandise costs. Changes in foreign currencies relative to the U.S. dollar positively impacted gross margin by approximately \$301 in 2021.

Gross margin on a segment basis, when expressed as a percentage of the segment's own sales and excluding the impact of changes in gasoline prices on net sales (segment gross margin percentage), decreased in our U.S. segment, due to our warehouse ancillary and other businesses, our core merchandise categories, and the LIFO charge, partially offset by the reserve for certain inventory in 2020. Our Canadian and Other International segments increased, primarily due to our warehouse ancillary and other businesses and certain of our core merchandise categories. These increases were partially offset by increased 2% rewards.