Table 1. Evaluated polymeric materials

Material	Description	Identification	Producer
Veracril	Heat-polymerized acrylic	PC	New Stetic S.A
Portux	CAD/CAM disc	CC	New Stetic S.A
3D denture base	3D resin	NS	New Stetic S.A
NextDent Base	3D resin	ND	NextDent B.V

Source: by the authors

Table 2. Average values and standard deviation (SD) determined for flexural strength, elastic modulus, and compression strength of the evaluated materials. Additionally, the values reported in the respective technical data sheets (D.S.) are included

Material	Flexural strength (MPa)			Elastic modulus (MPa)			Compression strength (MPa)		
	Average	*SD*	*D. S.*	*Average*	*SD*	*D. S.*	*Average*	*SD*	*D. S.*
PC	78.35	2.99	73.29	2224.41	168.08	2277	86.29	0.99	N.R.
CC	81.99	4.01	>80	2125.43	57.05	> 2000	85.03	2.14	N.R.
NS	83.51	3.17	N.R.	2208.76	66.89	N.R.	119.15	2.87	N.R.
ND	87.48	4.47	84	2277.72	58.46	2383	109.42	1.65	N.R.

N.R.: No information reported.

Source: by the authors

Table 3. One-way ANOVA analysis for the specific mechanical properties

Test	Origin	Sum of squares	Degrees of freedom	Mean square	F	*P*
Flexural strength	Between the groups	214.44	3	71.48		
	Within the groups	220.12	16	13.76	5.20	0.0107
	Total	434.56	19			
Elastic modulus	Between the groups	59716.10	3	19905.4		
	Within the groups	157595	16	9849.7	2.02	0.1515
	Total	217311	19			
Compression strength	Between the groups	4336.65	3	1445.55		
	Within the groups	65.92	16	4.12	350.87	0.0000
	Total	4402.58	19			

Source: by the authors

Table 4. Comparison in pairs using the Tukey's test. Asterisks (*) indicate statistically significant differences (Sig. diff.) between the evaluated pairs

Groups	Flexural strength			Elastic modulus			Compressive strength		
	Sig. diff.	*Difference*	*+/- Limits*	*Sig. diff.*	*Difference*	*+/- Limits*	*Sig. diff.*	*Difference*	*+/- Limits*
PC-CC		-3,646	6,71464		98,976	179,664		1,260	3,67448
PC-NS		-5,160	6,71464		15,646	179,664	*	-32,856	3,67448
PC-ND	*	-9,134	6,71464		-53,310	179,664	*	-23,128	3,67448
CC-NS		-1,514	6,71464		-83,330	179,664	*	-34,116	3,67448
CC-ND		-5,488	6,71464		-152,286	179,664	*	-24,388	3,67448
NS-ND		-3,974	6,71464		-68,956	179,664	*	9,728	3,67448

Source: by the authors