Little information is available in the literature on the effect of *Viscum album* on hepatic injury. Two recent studies done in patients with chronic hepatitis C, treated with a mistletoe preparation as monotherapy for 1 year, reported a significant improvement in elevated transaminases [2]. In a previous study suggests that mistletoe preparations may be a useful therapeutic intervention for patients with chronic liver disease. The mechanism(s) by which *Viscum album* modulates hepatic inflammation remains, however, unclear. The release of aminotransferases into the plasma was increased, indicating a increase in the severity of liver damage.

Table − Serum AST, ALT and BUN levels of 2 weeks in partially hepatectomized rats

Groups		AST (IU/l)	ALT (IU/l)	BUN (mg/dL)
Control		124.26±24.04	82.76±7.16	61.26±0.39
Experimen tals	1%	125.46±14.05	83.06±0.08	61.08±0.12
	1.5%	129.86±24.21	86.86±0.23	46.03±0.31

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STUDIES OF INTERACTIONS BETWEEN CYCLODEXTRINS AND FLAVONOIDS

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Cyclodextrins (CDs) are cyclic oligosaccharides typically contain six (αCD), seven (βCD) or eight (γCD) glucose residues. They have a relatively nonpolar cylindrical cavity, which can bind and solublize a wide variety of hydrophobic molecules like flavonoids for example quercetin and rutin. Quercetin is a flavonoid widely distributed in nature. It is a naturally-occurring polar auxin transport inhibitor, a plant-derived flavonoid found in fruits, vegetables, leaves and grains. It also may be used as an ingredient in supplements, beverages or foods. Rutin, also called rutoside is the glycoside

between the flavonol quercetin and the disaccharide rutinose. It is one of the phenolic compounds found in the invasive plant species *Carpobrotus edulis* and contributes to the antibacterial and antioxidan properties of the plant. Rutin inhibits platelet aggregation as well as decreases capillary permeability, making the blood thinner and improving circulation what makes it useful in medicine and veterinary medicine. Quercetin and rutin are flavonoids with low solubility in water. To increase the bioavailability of those oral-taken drugs it is worth to check influence of the cyclodextrins on those substance. Cyclodextrins are able to improve solubility of the guest drug inserted into their cavities and make the drug absorption in the gastro-intestinal tract more effective.

One of the methods to examine the complex formation between drugs and cyclodextrins is differential scanning calorimetry (DSC111) and UV-Vis spectroscopy. The set of parameters of interaction given by these experimental methods brings information about the strength and the energetic aspects of complex formation between guest and host molecules.

In this work the interaction parameters from DSC111 and UV-Vis measurements like binding constant, enthalpy of binding β-cyclodextrin with quercetin and rutin are presented. The parameters of complex formation are compared with each other and with available literature and the conclusions are made.

INTERACTION BETWEEN PAMAM G4-OH DENDRIMER AND 5-FLUOROURACIL IN AQUEOUS SOLUTION

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Poly(amidoamine) dendrimers (PAMAM) are polymeric macromolecules that can find their use as carriers oncologic drugs, including among others 5-fluorouracil. The surface groups in PAMAM dendrimers belonging to the fourth (G4) and fifth (G5) generation allow ligand molecules not only to bind with terminal dendrimer groups but also to penetrate the dendrimer interior and to react with the groups localized in it. More and more frequently tested polymers of this kind include dendrimers of the PAMAM class, which surface groups are substituted by hydroxyl groups. Such modified dendrimers are better tolerated by organism than their cationic equivalent.