WINE TOURISM AS A TYPE OF WELL-BEING TOURISM – LITERATURE REVIEW

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Abstract The purpose of this study is to examine the effects of wine tourism on well-being. Wine tourism includes many activities, and not only wine tastings, perhaps paired with food tastings. It includes hiking and biking in the vineyards, reading literature on wine (fiction and non-fiction), attending seminars and conferences on wine, getting acquainted with new landscapes and socializing with others. Another issue relates to whether wine, particularly red wine, confers additional health benefits. Within the Mediterranean diet, wine seems to be an essential component. The starting point for wine and health studies was the "French Paradox", which suggests that consuming red wine daily not only helps the cardiovascular system, but also increases lifespan due to the resveratrol found in the skins and tannins of red grapes. Recent evidence suggests that wine consumption is correlated with less stress and prevention of the development of certain cancers.

Keywords: health,

wine tourism, well-being, active life, rural areas

1 Introduction

In the tourism literature, studies of the so-called happiness factor (McCabe & Johnson, 2013) and well-being are on the rise. Well-being can be defined as a state "which allows individuals to realise their abilities, cope with the normal stresses in life, work productively and fruitfully and make a contribution to their community" (WHO, 2001). It is thus important that a tourism offer provides tourists with experiences that can positively influence the quality of their lives (Kruger et al, 2013), and wine may easily be associated with happiness and well-being. Wine is a fruit product, but fermentation produces a variety of chemical changes in the must, and so wine is not simply grape juice with ethanol. Fermentation alters the must by altering the conjugation of organic acids and phenolics (phenolic acids and polyphenols), by extraction and formation of copigments and the development of an anaerobic and protective redox potential (German & Walzem, 2000). Wine is considered as a medicinal dietary product. Hippocrates, traditionally considered as the father of medicine, prescribed wine for a diversity of diseases, and "enotherapy" (wine treatment and "ampelotherapy") has long been practiced. Grapes contain up to 30 percent easily digestible sugars in the form of glucose, fructose and minor amounts of sucrose. Fructose is absorbed by the human body without the involvement of the gastrointestinal tract, which is of great importance in the prevention of diabetes (Fiore et al., 2019). Today, wine is a unique and highly valuable food product made by the biotechnological processing of juice that is derived from an intensively cultivated agricultural commodity (German & Walzem, 2000). Red wine in particular is a luxury product, usually consumed as part of a full meal, and is astringent and bitter. Wine consumption, particularly within pre-1991 populations, depends on multiple cultural, social, economic, and gender- and agerelated factors (Del Rio C & Prada, 1995). Red wines are rich in polyphenols, such as phenolic acids (gallic acid, caffeic acid, p-coumaric acid, etc.), stilbenes (transflavonoids (catechin, epcatechin, quercetin, rutin, myricetin) (Kammerer et al., 2004). Resveratrol is considered the major functional constituent in red wine, which could prevent or slow the progression of a wide variety of illnesses, including cancer (Jang et al., 1997), cardiovascular disease (Bradamante et al., 2004) and ischemic injures (Sinha, Chaudhary & Gupta, 2002), as well as enhance stress resistance and extend the lifespans of various organisms, from yeast (Howitz et al., 2003) to vertebrates (Baur & Sinclair, 2006; Valenzano et al., 2006).

Different grape and wine varieties have emerged over centuries of cultivation, according to the skills and tastes of grape growers and wine makers. Most of the differences among grape varieties, and thus wines, arise from variations in secondary plant metabolites that influence its taste, flavour, colour, and stability (Schreier & Jennings, 1979), and thus enologists tend to emphasize these characteristics (Sivertsen et al., 1999), and such differences are one basis for wine preferences among consumers and for patterns of wine consumption within populations.

Among wines, red wine is considered to have a more protective effect, due to its greater content of antioxidant substances released from the grape's skin and seeds (polyphenols). In the making of white wine, these are removed immediately from the must, which is left to ferment without them. As antioxidant capacity is strongly correlated with total polyphenol content *in vitro*, white wines have very weak antioxidant capacity (Lugasi & Hovari, 2003). Notwithstanding the fact that white wine contains hydroxycinnamic acids and tyrosol, which are also known to have antioxidant properties (Thirunavukkarasu, 2008), their effects on the oxidative stress parameters in plasma and urine taken from humans have not been detected, as they have for red wines (Pérez et al., 2002). Additionally, red wines have higher procyanidin B content than white, which further supports their stronger anticancer activities (Eng et al., 2003). The importance of polyphenols in the health-promoting properties of wine is discussed below. Together with polyphenols, ethanol is considered a key component with regard to health effects.

A significant part of overall psychological well-being is satisfaction with various aspects of life (Campbell, 1981; Campbell, Converse, & Rogers, 1976; Olsen et al., 1989). Subjective well-being is defined as the feelings individuals have about their lives or their perceptions of achieving what they want in life (Diener, 2000; Veenhoven, 1991). Sagiv and Schwartz (2000) found that personal values affect subjective well-being in different culture settings. Personal values are defined as "enduring beliefs that guide action, attitudes toward objects, and evaluations of behavior and events" (Rokeach, 1973). Since personal values reflect internal states that affect stimuli and responses (Eagly & Chaiken, 1993), they have been regarded as affective predictors of customer behaviour in various sectors (Beatty et al., 1985; Madrigal, 1995).

The Mediterranean diet is characterized by a high intake of vegetables, legumes, fruits, nuts and unrefined cereals, high intake of olive oil but low intake of saturated lipids, moderately high intake of fish, moderate intake of dairy products, mainly in the form of cheese or yogurt, low intake of meat and poultry, and regular but moderate intake of alcohol, primarily in the form of wine and generally during meals (Trichopoulou et al., 2003; Willett et al., 1995; Shen et al., 2015). The World Health Organization (WHO) has adopted this pattern as a dietary guideline, with the concept of the "Mediterranean diet" originating from several observational studies done in the 1950s. Later, the Seven Countries Study, a cross-cultural investigation comparing middle-aged men from northern and southern Europe, was important in recognizing the role played by the Mediterranean diet in protection against heart disease (Key, 1980).

In 1992, Renaud and De Lorgeril (1992) published a study confirming the association between death by cardiovascular disease and dietary intake. The higher the general dietary intake, the more people died from cardiovascular disease in all European countries except for France. If wine intake was considered, the French population fit the regression model perfectly.

Consumption of red wine has increased around the world over the last two decades, and has often been promoted as part of the "French Paradox," a diet rich in fat but still with moderate effects observed on public health. The term was first used in the newsletter of the International Organization of Wine and Vine in 1986, and its explained by "the significant source of phenolic compounds, with antioxidant properties especially in red wines« (Fiore et al., 2019). The research that uncovered the French Paradox and detailed intriguing epidemiological observations was made as part of a large study that compared dietary intakes and disease incidences in several different countries, including Canada, Italy, France, Britain, and the United States. Known as the MONICA Project (Monitoring of Trends and Determinants in Cardiovascular Disease), it found that red wine consumption provided an apparent paradoxical protection from atherosclerotic cardiovascular disease in the French population (Renaud & de Lorgeril, 1992). According to the MONICA data on diet and disease, the French population had a lower incidence of atherosclerosis-related deaths than populations from the other countries studied. Low death rates among the French occurred despite the consumption of diets normally linked to high rates of atherosclerotic mortality and blood cholesterol concentrations consistent with elevated atherosclerotic risk. That study revealed that the incidence of heart infarction in France is about 40% lower than in the rest of Europe, and this French Paradox was linked to the intake of red wine.

Wine tourism can be defined as visits to vineyards, wineries, wine festivals and wine shows, for which wine tasting and/or experiencing the attributes of a wine region are the prime motivating factors for visitors (Cambourne et al., 2009). The picture below shows that the vineyards themselves seem to invite us to walk, ride or cycles among them.



Figure 1: Vineyards in Brda region. Source: Petek, 2020

2 Methodology

Systematic review

In previous tourism research, wine and health have been studied in various fields, including in terms of health (Shrikhande, 2000; German & Walzem, 2000; Xu et al., 2010), chemistry (Xiang et al., 2014; Waterhouse, 2002) or consumer perceptions of wine (Samoggia et al., 2016.). The aim of this chapter is to present a literature review

on the scientific research already done on wine and health. During the decade 2002–2011, 1,266 papers on related topics were published (1,174 original papers (92.73%) and 92 review papers (7.27%)). The number of papers increased steadily over the decade, from 84 in 2002 to 221 in 2011. Most (65.56%) were published during the period 2007–2011. This growth is more striking for original papers than for review papers. The 1,174 papers were published in 535 different journals (Aleixandre et al., 2013).

The method for this study was a systematic review, and the following databases were used: WoS, Scopus and Google scholar. Our main search words were: "wine", "health", "wine and health", "well-being", "well-being and wine", "resveratrol" and "resveratrol and health". We included articles written in English, and we did not limit the search with regard to the years of publication. The search was conducted in September 2020. Not all of the found articles were relevant, as they were from completely different fields, such as example chemistry. Altogether, 300 articles were used from 1973 – 2020. Abstracts and conclusions were read for all of them, and for the most interesting of these the whole article was taken into consideration. These were published in many different journals, including *Studies in Agricultural Economics*, *British Food Journal*, *European Journal of Clinical Nutrition*, and *International Journal of Wine Research*.

2.1.1 Results

The analysis showed that a lot of research has already been done in this area and it all started in 1992, when Renaud and De Lorgeril published their study about the French Paradox. Since then there are studies claiming that red wine is very good for our health (Fiore et al., 2019; Guerrero et al., 2009; Higgins, & Llanos, 2015), along with those that are not so sure about this (Xiang et al., 2014).

From all the studies that have been carried out in the health and wine field, it can be affirmed that supplementing one's regular diet with red wine increases total antioxidant capacity in plasma, HDL lipoprotein, fibrinolytic and antithrombin activity, and vitamin C, and also reduces oxidative damage and platelet aggregation. Above all, it diminishes the risk of cardiovascular diseases (Avellone, 2006); Rimm, 1995). More recently the same conclusion was reached for diabetic subjects after myocardial infarction (Marfella et al., 2006).

Some studies argue that wine could have an influence on cancer risk. Moderate consumption of wine reduces the risk of non-Hodgkin's lymphoma (Briggs et al., 2002), adenocarcinoma of the oesophagus, prostate cancer (Platz et al., 2004; Schoonen et al., 2005) and gastric cardia (Gammon, 1997). However, other authors have not found any relationship (Bessaoud & Daures, 2008; Sutcliffe et al., 2007), and some even found a negative effect (Longnecker et al., 1990).

The results show that long-term, moderate consumption of red wine has reduced the incidence of many diseases, such as risk of coronary heart disease (Leikert et al., 2002), atherosclerosis (Vinson et al., 2001), and cancers (Middleton et al., 2000).

Resveratrol has been linked to preventing declines in cardiovascular function caused by age (Das et al., 2011), and it is believed that France surpasses many countries in average life expectancy partly due to the common practice of drinking red wine with meals. The French consume red wine moderately, at 2-3 glasses daily, reducing the unhealthy effects of high cholesterol foods common in the French diet, including bread, cheeses, and rich desserts (Brownlee, 2006). More than 20 years after the discovered of the French Paradox, there have been a substantial number of studies suggesting possible the health benefits of red wine, and if we connect wine and health then we can easily see the connection to a good life and greater well-being. The picture below shows the wine estate of Marjan Simčič from Brda, Slovenia, where we can enjoy a view of the vineyards from a pool – the ideal setting for a relaxing and enjoyable tourist visit.



Figure 2: Marjan Simčič estate.

Source: Petek, 2020

3 Conclusions

Based on the literature review it can be concluded that there are health benefits from moderate drinking of red wine, if consumed moderately. Research has established that eating five to seven portions of fruit and vegetables and having two glasses of wine a day can enable a longer and healthier life. However, drinking wine is not an essential part of wine tourism, as engaging in outdoor activities, such as hiking and cycling through vineyards, as well as other forms of physical, will suffice. This is why it is essential to raise awareness of an active life and its connection to well-being, not only among tourists, but also among tourism stakeholders and designers of tourism products. When planning wine tourism products, experts of many fields should be involved, not only winegrowers, as cooperation between different stakeholders and experts is a key to tourism products that enable quality tourism experiences and the greater well-being of those engaged in them. This is why education of tourism experts and following new trends, such as digitalization and the development of smart villages and towns, is very important. Well-being can mean different things for each individual. However, the vast majority of people agree that it is associated with being active, good sleeping habits, having a healthy lifestyle, eating good food, and – for many, but not all – drinking quality wine. The purpose of this chapter is not to promote mindless drinking, but only to demonstrate and remind readers that we can have a good time, feel better and be wine tourists in other ways as well. Personally, we also want those certain French rituals to become ours. Having a glass of quality red wine at lunch or dinner as a part of one's daily routine can help us to slow down and take time to enjoy life.

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